Some Remarks ON DIPHTHERIA.

Being an Address delivered at the Conference of Medical Officers of Health at Newcastle-on-Tyne on Sept. 3rd, 1896,

BY ALFRED HILL, M.D., F.R.S.E., F.I.C.,
MEDICAL OFFICER OF HEALTH, BIRMINGHAM, PRESIDENT OF THE CONFERENCE.

GENTLEMEN,—The experience of Birmingham in respect of diphtheria during the last twenty-three years has been so peculiar and striking that I am prompted to embrace this opportunity to make a few remarks upon it, more especially as the disease has recently undergone important and quite unexpected developments, not only locally, but in the country generally. I am not presumptuous enough either to attempt the elucidation of its etiology or to suppose I can do much to advance the means of its prevention, but I have thought it would prove interesting, and possibly to some extent useful, to state some of the facts in connexion with the Birmingham outbreak, and make some comparison between our city and other large centres as well as the country generally. My official experience and the statistics of diphtheria in Birmingham date from the year 1873, when the death-rate of this disease was 310 per 1,000,000 persons living.

[Dr. Hill then gave some statistics of diphtheria in Birmingham and the country at large, and continued:]

From the year 1873 till the end of 1894, therefore, the history of diphtheria in Birmingham was singularly unlike that observed in the country at large, for in the latter a rather slow but very steady increase took place, while in the former a marked decrease was manifest. But in 1895 all this was changed; diphtheria in Birmingham began to increase by leaps and bounds, and, like others. I am quite at a loss to account for this sudden increase, which still progresses and continues to become more marked quarter by quarter. At such a time sanitary authorities and medical officers of health are intensely desirous of discovering the cause and all the means of dissemination of the disease, the mortality from which is so considerable. It is particularly embarrassing to the medical officer of health to be expected by the sanitary authorities and others to give unhesitatingly an explanation of the causes and means of prevention of the disease, which they sometimes ask for, and very trying to come under condemnation because such explanation cannot be given, for diphtheria is, and one acutely feels that it is, one of those *opprobria medicinæ* of which there are still too many, and towards the diminution of which hygienic effort is constantly directed. It behoves the sanitarian, therefore, to do everything in his power by constant and careful observations, records, and experiments, to add something to the common stock of knowledge at present possessed on the subject.

Diphtheria is looked upon by most people as a comparatively new disease. I think this is a common impression even in some medical minds, and it is probably the result of the comparatively new name given to it by Bretonneau seventy years ago, when in his work on the subject he described an epidemic of it which had visited Tours in the year 1818. Observing the adventitious "skin" or membrane in the throat to be a characteristic accompaniment of the complaint he named it "Diphthérie." I remember that about twenty years later, somewhere in the forties, much stir was created by an importation into England of some very severe and fatal cases of a disease then called "Boulogne sore-throat," by children who had visited that town, and it was attributed to the condition of the port or harbour, which at that time received the sewage of the town, the solid portions of which lay exposed, as I have seen it, a filthy and most offensive mass of mud and excrement, whenever the tide was out. This disease was the newly-named diphtheria. Some years later, in 1857, the most severe outbreak known in this country and Europe generally, occurred, since which time the disease has never left us, while it shows a marked tendency to increase and has become endemic in our large centres of population. It would thus appear that epidemic visitations of this disease occur at very irregular intervals, which, however, are frequently exceedingly long, as much as thirty years, in which respect it differs widely from the other infectious diseases. Before the disease was christened diphtheria, however, it had existed under other names from the very earliest times, and the symptoms described by ancient and mediæval authors, who called it "angina maligna" agree with those which characterise it to-day. So that like other zymotics it continues to "breed true." A feature which invests the disease with additional interest, is that amongst the principal zymotics it exhibits a continually increasing relative numerical importance.

[Dr. Hill then gave statistics to illustrate this point; he went on:]

The subject of locality is one of great practical interest. The change of principal incidence from the country to the towns, or rather from sparsely inhabited districts to those whose populations are more dense, is as remarkable as it is true. It is unnecessary to dwell at length on this point, striking as it is, inasmuch as it admits of no dispute, and is very clearly set forth in Dr. Longstaff's Report to the medical officer of the Local Government Board in 1887.

[Dr. Hill here gave statistics bearing on the tendency of diphtheria to increase more in large towns than elsewhere. He continued:]

In connexion with the influence of locality that of elevation may be conveniently considered as far as Birmingham is concerned. I have heard many statements on this subject, some persons maintaining that the lowest parts, others that the highest parts of the town suffer most, the reason assigned for the latter being that sewer gas travels from the lower to the higher levels and escapes at the upper end of the sewerage system there exerting its injurious effects, among others spreading diphtheria. The city varies in height from 675 to 281 feet above sea level, it is divided into eighteen wards, the most elevated one having a mean height of 530 feet, the lowest a mean height of 385 feet above sea level. The ward having the greatest mean height had virtually the same case-rate as the least elevated ward but two, while the ward having the highest case-rate occupied about the middle position. This want of the relationship in question is not peculiar to 1895, but extends, I find, to the two preceding years. It is thus evident that there is no definite relationship between elevation and diphtheria prevalence.

I have given some attention to the subject of house accommodation in Birmingham in reference to diphtheria. There is a common idea that diphtheria is more prevalent in better class houses than in inferior ones. In order to test this notion I have tabulated the houses which were invaded by the disease last year, and find that 195 out of 517 consisted of five rooms and upwards. So far as I can learn from the census returns there were in 1891 about 41 000 houses in Birmingham containing five rooms or more, out of a total of 95,000; thus diphtheria occurred at one out of 170 of the smaller houses, while only one out of 210 of the larger houses was invaded, the larger houses thus suffering considerably less than the smaller ones. Closet accommodation cannot be ignored as a very probable source of danger, and I therefore made inquiries last year into this matter. Assuming, as I had reason to do, that about as many houses were provided with pan privies as with water-closets, there were found to be rather more cases amongst houses furnished with pan closets than amongst those having water-closets. It was also found that a second case occurred at one out of eleven of the houses with pan closets, and only one out of twenty-nine of the houses using water-closets. These facts appear to show that pan closets favour the introduction of the diphtheria virus a little, and when it is introduced facilitate its spread in a marked degree. School attendance, with its aggregation of large numbers of children in the closest association in an atmosphere by no means too pure, has been naturally regarded as a very probable means of spreading the disease, which it no doubt is in some cases. I have no intention of entering upon a discussion of this question which, simple as it appears, is still debatable. I only wish to lay before you the results of my observations in Birmingham during last year. It is by the collection of similar experiences from a wide field and over a long period that such subjects can be removed from the region of doubt to that of certainty. On this point I made the following remarks in my last annual report: "I have endeavoured to discover how far the bringing together of a large number of children in schools affects the spread of diphtheria. Of the 517 houses invaded there were 163 in which no children attended school, and 163 others in which the patient did not

attend school, though other children from the house did so. I do not see how any school influence can be made out in these cases. This leaves 186 patients, who themselves were in attendance at school, out of a total of 517. But these 186 cases occurred in children attending no less than 74 schools, giving on an average a little more than 2 cases per school per annum, and in only 41 instances had there been a previous case at school within a fortnight. These 41 cases out of 517 may possibly have contracted the disease at school. I do not see the least probability that any of the others did so. I think it must be admitted then that schools have very little to do with the spread of diphtheria so long as proper precautions are taken to keep away all children from infected houses as is done in Birmingham." But while this is so as a general rule there can be no doubt that occasionally a school does become a centre of infection. This was well illustrated last year at Harborne. There had been very little diphtheria there until Oct. 9th, when the case of a child attending the Board school was notified to me. At intervals varying from one to thirteen days as many as ten other cases occurred at the school in less than six weeks, and the patients all being very young children they would, of course, be closely associated at school. Moreover, between Oct. 9th and Nov. 29th there were altogether eighteen cases of diphtheria and croup at Harborne. Of these eighteen patients thirteen attended the school, and four out of the remaining five lived with children who went there, so that only one case occurred in the district which did not connect itself either directly or indirectly with the school. From inquiries made I learned that about nine years before there had been an outbreak of diphtheria at the same school, and the drainage had been re-arranged. The old drain was disconnected from the sewer, but was not taken out at that time. About Oct. 16th this old drain was taken up, when it was found to be full of dry solid matter. This, however, was a week after the first case occurred at the school, so that it does not seem that the disturbance of the ground originated the outbreak, though perhaps it had some influence on the spread of infection among the scholars. At my request the school buildings were fumigated. During the next month only two cases occurred at Harborne, and neither of these was in any way connected with the school.

Among other matters calling for further observation and study in relation to the disease is the liability of animals, particularly of cows and cats, to attacks of the disease and their susceptibility to inoculation with cultures of the diphtheria bacillus. In these inoculations, except in the case of the cow, the bacilli are found only at the point of inoculation, and the constitutional effects are therefore probably due to the action of a chemical poison produced by the bacillus and carried into the circulation. This view is confirmed by the experiments of Roux and Yersin, who proved that a pure culture from which the bacilli had been removed by filtration was still pathogenic, and on inoculation by it it actually produced the general symptoms of the disease. In the case of cats the danger of their communicating the disease to human beings consists only in contact or close association with them. The conveyance of the infection by cats, which Klein considers are susceptible to true diphtheria and capable of communicating it to each other and human beings, is worthy of careful consideration. It is consolatory to know that he considers it proved that fowls do not suffer from any ailment either identical, or intimately connected, with diphtheria. With cows there is greater danger, because, according to Klein, the cow suffers from a disease resembling diphtheria and the milk contains the bacillus, thus offering a remarkable exception to man and the other animals in which the bacillus is confined to the local lesion and neighbouring glands. The bacillus, moreover, grows readily in milk, and milk is regarded, after many careful investigations, as a real source of danger. These facts present very vividly the danger contingent on the use of milk, because it may be infected not only after, but also before, it is drawn from the udder.

The natural issue of these considerations is the application of all such knowledge as we possess to the prevention and mitigation of the disease. The means to be employed embrace notification, isolation, rigid exclusion of diphtheria cases from scarlet fever wards, disinfection of clothing, bedding, furniture, &c., strictly regulated school attendance, supervision of milk supplies and the boiling of all milk, removal of dampness, darkness, and other insanitary conditions from sites and dwellings; careful observation and isolation of cases of sore-throat, however mild; the destruction, or at least effective disinfection, of sputa: and, finally, what up to the present time has not received the attention it demands, the resort to the bacteriological examination of all cases of sore-throat, however trivial they may appear, and the employment of bacterial cultivation during convalescence from diphtheria until the microbe can no longer be detected. This proceeding is necessary because of the uncertainty as to the time when the danger of infection is at an end. Such bacteriological examinations would, of course, occupy much time and entail much expense, and they could only be performed in laboratories established for that purpose, where also could be practised injections of serum antitoxin, from which it would seem that much is to be expected not only from a curative, but also from a preventive, point of view.

A Clinical Lecture

ON

SQUINT UP TO DATE,

Delivered before the Nottingham Medico-Chirurgical Society

BY CHARLES BELL TAYLOR, M.D., F.R.C.S. EDIN.,

HONORARY SURGEON TO THE NOTTINGHAM AND MIDLAND EYE INFIRMARY.

MR. PRESIDENT AND GENTLEMEN,—The first operation that I saw Von Graefe perform was undertaken for the correction of an internal squint, and I recall that the patient, a stout little gentleman with a profusion of white waistcoat and a dress improver of his own, kicked and shouted "Mein auge! mein auge!" during the whole process, although he was supposed to be under the influence of chloroform. I ventured to suggest that the operation I had just witnessed would need supplementing, a remark with which the Professor concurred, adding that he always claimed a free hand and habitually informed his patients that two, three, or more operations might be requisite in order to attain the end in view. I cannot say that I have found it necessary to be quite so exacting myself; but it is clear that we shall have to adopt Von Graefe's formula, only more so, if Professor Landolt's suggestion to substitute advancement of the external rectus for tenotomy of the internal in cases of convergent concomitant squint is generally acted upon. Of course we all know that advancement of the internal rectus, with or without tenotomy of the external, is the operation *par excellence* in cases of divergent squint, and it certainly does, *à priori*, seem only reasonable to suppose that advancement of the external rectus, with or without tenotomy of the internal, would prove equally efficacious in cases of convergent squint. But it is not so; advancement of the internal rectus alone will suffice to restore parallelism—is really the *sine quâ non*—in cases of divergent squint, while advancement of the external rectus, unless supplemented by tenotomy of the internal—the *sine quâ non* in this case—is, in my experience, altogether futile and insufficient in cases of convergent squint. This is owing to the fact that the internal rectus is much stronger, shorter, performs a more important function, and is more constantly exercised (as in convergence for near objects) than the external, and being attached in closer proximity to the cornea has a much greater purchase upon the globe; hence, when the eye turns out it is not usually, as one might suppose, because the external rectus has overcome the internal, but because the eye is so shaped that it cannot be conveniently turned inwards, as in some cases of myopia; because, being blind or nearly so, it glides outwards for lack of visual guidance; or because the internal rectus is paralysed, insufficient, or separated from the globe by accident or surgical operation. For these reasons division of the external rectus, or its advancement—operations which from the far back insertion of the tendon and its diffuse attachment to the globe are comparatively difficult—have but a slight effect upon the position of the eyeball, and are useful mainly as adjuvants to advancement

of the internal rectus in cases of divergent squint or in cases of slight insufficiency of the same muscle.

Professor Landolt tells us that, "By advancement of the muscle he understands its detachment and its subsequent attachment by means of sutures, which fix the muscle and all the tissues which surround it in close proximity to the cornea, until (as he says) this new insertion has become quite consolidated."[1] But it appears to me that the muscle in this operation is merely detached and attached again in the same place, since no fresh raw surface is formed for its reception, a proceeding which, according to my experience, is superfluous with tenotomy and useless without it. Note also in these cases—presumably the majority—there is no mention of resection, no cutting off a piece of tendon, no shortening to give it greater purchase of the external rectus, already lengthened and degenerated by constant drag and weakened by prolonged loss of function, but simply its so-called advancement as near to the cornea as possible; and how that is going to cure any deformity worth calling a squint is exceedingly difficult to understand. Of course, Professor Landolt succeeds—he must succeed—and I should be the first to acknowledge all that we owe to his great genius and profound erudition; but it is only, as I gather from a remark at the end of his paper, by a resort at last to the much-deprecated tenotomy which has done such yeoman service for us in the treament of these ofttimes distressing cases. "Should I fear," Professor Landolt says, "that the advancement alone would not be sufficient, I resect a larger or smaller piece of the extremity of the muscle. In this way (he adds) we succeed in cases of high degree of strabismus, especially if one follows up the operation by orthoptic exercises, and if, in spite of everything, the patient continues to squint, there is always time (he says) *to add a tenotomy* to our two advancements";[2]—i.e., two advancements, glasses, prisms, orthoptic exercises, and *at last* tenotomy, first on one eye and then perhaps on the other. Of course in this way, by doing several operations and waiting months between them, we might cure any squint, if only, I may add, we had patients who would not object to any amount of trouble or any number of operations. But really in actual practice we do not find such people, and in deciding what is the best course to adopt we must perforce limit ourselves to that which is possible. Two, three, or more operations involve in many cases the repeated administration of anæsthetics, which the patient dreads more and more each time they are given. Repeated visits, prolonged treatment, and but very slight result of all they have undergone, will dishearten the best of patients until they get completely out of hand and render us powerless to carry out any treatment, however well devised it may be, for their benefit. "Please, sir, I've come to have my eye put straight," said a small, ragged girl with a battered hat to me in the street as I arrived home about half-past nine o'clock a few nights ago. I was struck with the humour of the situation and replied, "Eye put straight! Certainly; step this way;" dropped some cocaine into her eye, divided the internal rectus tendon, presented her with half-a-crown for pluck in dispensing with an anæsthetic, and sent her on her way rejoicing. Clearly it would not be possible with patients like these—and they form a very large proportion—to carry out repeated and tedious operations upon each eye by advancement, orthoptic exercises, and alternately tenotomy upon each eye at varying intervals; and, according to my experience, the better class quite as earnestly desire to be cured by one operation if possible, and lose faith just as readily if you suggest prolonged, repeated, and tedious treatment.

Professor Landolt complains that our patients do not obtain the blessings of binocular vision, as his do, although we may have managed to put the eye straight by repeated tenotomies. "If," he says, "it were a question of putting an eye straight tenotomy or repeated tenotomy might be sufficient; but he wished to lay special stress upon the fact that the operation was not by any means the cure of strabismus; it was only *one step* in a long course of treatment."[3] But, gentlemen, to carry out this treatment you require the intelligent co-operation of the patient, co-operation which it is impossible to obtain in the case of children—the most frequent subjects of this affection—and if you wait until the patient is old enough and intelligent enough and self-denying enough to assist, you will find that the squinting eye has become amblyopic from exclusion and binocular vision quite out of the question.

I need not tell you that the slightest displacement of one eye produces double vision; the brain has a horror of double images, and suppresses the image of one eye, which from that moment begins to get weaker and weaker still until, as time goes on, it not unfrequently becomes impossible for the patient to decipher even very large print with it. Hence, as Professor Noyes has pointed out, true and permanent binocular vision, either with or without optical correction, is attained in only about one in ten of those patients who are old enough and intelligent enough to submit to the required instruction and treatment. In fact, binocular vision is dependent upon cerebral coördination, and unless that faculty is exercised in early life it is very seldom subsequently acquired.[4] I think, therefore, gentlemen, that if your patients after operation do not suffer any inconvenience, and so long as there is no noticeable defect, we may fairly claim that they are cured, even though one eye may be amblyopic and binocular vision conspicuously absent. No doubt the ideal treatment of these motor anomalies is to restore parallelism without surgical interference at all, and in some slight cases this may be done. For instance, in case of convergent squint, strong solutions of atropine, gr. iv. to 1 oz., or weaker solutions of scopolamine, gr. i. to 1 oz., may be used with appropriate spherical or cylindrical glasses; thus by neutralising the cause, hypermetropia, we may sometimes get rid of the effect—abnormal convergence. But, alas! there are many cases in which the deformity persists, although we have removed the cause, and the squint, so far from assisting, actually disturbs vision. In these cases nothing but an operation will suffice, and the sooner it is resorted to in my opinion the better. There are several

FIG. 1.

Hook passed under tendon of internal rectus preparatory to division.

methods of operating for internal squint, but the one I have found most satisfactory is the following: I stand behind the patient and make an incision with scissors directly over the insertion of the muscle; I then penetrate the capsule of Tenon and passing a small hook beneath the lower border of the internal rectus tendon cause the extremity of the hook to project beyond its upper border, cut on the point and divide the attachment of the muscle under the small bridge of conjunctiva, which is allowed to remain (see Fig. 1). In this way we have a puncture and a counter-puncture, but no open wound, and the tendon—and the tendon only—is divided as readily as though it had been laid bare. If the squint is a very bad one I operate on both eyes at once, allowing the patient to peep afterwards with the one

[1] Transactions of Eighth International Ophthalmological Congress (Constable, Edinburgh), p. 147.
[2] Ibid., p. 151.
[3] Ibid., p. 155.
[4] As C. Schweigger says: "Squint originates mostly at an age when binocular vision has not been habitual, and even if the operation gives a position which renders fusion possible, it is not acquired."—Archives of Ophthalmology, January, 1895.

that has been least interfered with. If the deformity is very great I exaggerate the effect of the tenotomy by inserting a suture over the inferior rectus tendon, and, having thus secured control of the eyeball, turn it outwards and fix it in this position by attaching the suture to the external canthus. This forced divergence of the eyeball is maintained for a day or two, according to circumstances, and the internal rectus, being compelled to attach itself further back on the eyeball, loses its power of abnormally converging the globe.

With regard to cases of divergent squint, I have endeavoured to simplify the ordinary, complicated, and somewhat formidable operation by merely shortening the internal rectus without interfering with the external. This is easily done by catching up the tendon on a hook, exposing it, and freely separating its attachment to the sclerotic. I then seize the tendon with forceps and by two horizontal snips convert it into a narrow strip; the base of this strip is then transfixed by a needle armed with a thread, half an inch or more of muscular and tendinous tissue is cut off, and a firm attachment to the sclerotic immediately over the inferior rectus tendon is secured by perforation with a needle attached to the other extremity of the thread;[5] the two ends of the ligature are then carefully drawn together while the eyeball is turned inwards. Any amount of inversion may be thus obtained, only one suture is required, general anæsthetics may be dispensed with, and the operation admits of rapid execution. Of course, the external rectus may be advanced in obstinate cases of internal squint, or such advancement may form the first step of the operation, as in the practice of Professor Landolt; but it is useless, so far as my experience goes, to attempt to diverge the eye by advancing the external rectus unless you at the same time weaken *par recul* the internal rectus, and if you do weaken *par recul* the internal rectus you will very seldom find it necessary to resort to advancement of the external. It appears to me, therefore, that Professor Landolt's suggestion is to be deprecated: first, because he proposes to substitute in all cases of convergent squint a difficult and somewhat complicated operation for one which is very simple and which admits of instant execution; secondly, because the external rectus, from its comparative length, tenuity, and diffuse attachment to the globe, is peculiarly unfitted either for advancement or resection; and thirdly, because any effect that advancement of the external rectus may have as an adjuvant to tenotomy of the internal in cases of convergent squint is more readily attained by simply fixing the eye outwards with a suture without interfering with the external rectus at all, and of course without any open wound.

[5] The conjunctiva is often so defective that it gives no support to stitches, therefore I suture the muscle to the tendinous insertion.

AN ESSAY ON CLINICAL UROLOGY IN INFANCY AND CHILDHOOD.

A CHAPTER FROM AN UNPUBLISHED BOOK ON DIAGNOSIS IN CHILDREN.

BY FERNANDES FIGUEIRA, M.D.,

EX-ASSISTANT OF THE PEDIATRICS CLINIC IN THE FACULTY OF RIO DE JANEIRO.

THE functions of the urinary system are in full operation at the time of birth, because it is then organically complete, notwithstanding the anatomical peculiarities with which it is endowed in infancy. These peculiarities consist in the relative weight, size, and even different structure of the kidneys from that in the adult, and in the different conformation and position of the bladder. The kidneys are proportionally more voluminous in the child than in the adult, for whereas the relation between the weight of the kidneys and the body is represented in the adult by 1:1225, these figures are in childhood 1:82-100, according to Huscke and Kölliker. They weigh from twelve to thirty grammes, and for about four years (the average time) they exhibit furrows on their surface, forming lobes, these lobes corresponding to the renal pyramids. The medullary substance predominates over the cortical, and, according to the calculations of Todt, this predominance may be indicated by the proportions 56:21·5. The connexions and the position of the kidney do not present anything special, except that the suprarenal capsule which has approximately the form of a triangular pyramid covers the third part of the surface of the organ. Contrary to what occurs in the adult, Ballantyne thinks that the left kidney is not higher or longer than the kidney on the right. The hilus corresponds to the level of the second lumbar vertebra. The bladder in the child is oblong and acuminated, with its base rising to the pubic symphysis. The frequency of micturition in the early periods of life is caused by its small size. The anterior aspect has a triangular form, which is not covered by the peritoneum and is in contact with the abdominal parietes. In regard to function and structure, apart from the ureters and the external conformation of the genito-urinary organs of the two sexes, it may suffice to say that there is a disposition rather urinary than genital. Catheter No. 2 of the English scale (Ballantyne) fits the urethra. The diseases of the urinary system and the other organic local affections demand a practical knowledge of clinical urology, and this chapter of infantile semeiotics is as important as it is generally neglected either because it is believed erroneously that disturbances of the urinary functions are but infrequent in the child or because of the usual difficulty to collect urine necessary for examination. In order to collect the urine an indiarubber apparatus adaptable to the sex of the little patient may be used, or, failing this, a small catheter which does not cause the least danger when used with the necessary caution. It is preferable, at any rate, to obtain the urine by catheterism than to keep a sponge in contact with the genitals, an old method which is especially unfit for microscopic examination. To my mind it is not to be recommended as a means for collecting urine for examination that the child should be placed on an impervious sheet, from which the urine runs off, since this may imperil the health of the little being and it is far from a clean process. The same criticism does not, however, apply to the advice of d'Espine and Piest, which may be thus summed up—namely, to make whenever possible, after an interval of sleep, methodical pressure over the bladder from above downwards. These authors say that in doing so urine for analysis can be easily obtained, and that the process is so simple that nurses can practise it. A practical means to obtain urine is also to excite evacuation of the bowel by the aid of a suppository or a clyster, and at the opportune moment to gather the vesical contents, of which the emission, except in very rare cases, does not take place at the same time as defæcation (Dr. Olinto of Porto Alegre). All these procedures are only needed, as everybody knows, in the first period of life. Later there is the same simplicity of means as in the adult, and, according to more or less early training, children naturally ask for opportunities to discharge the lowest needs of animal life.

First micturition.—The newly born child seldom empties the bladder whilst it is becoming detached from the maternal organism. After birth the fact of hours passing without the first micturition having taken place must not be considered abnormal, since this micturition is sometimes performed only after the child has been alive for twenty-four and even forty-eight hours, and this without appreciable morbid cause. This is because there is in such cases no retention of urine, but generally a lack of secretion, depending, according to some writers, upon the kind of alimentation. Thus a child suckled at the breast of a nurse having a copious mammary secretion must imbibe more milk than the child who takes his supply of nutriment from a feeding-bottle. Hence results a greater or smaller flow of urine. Berti has related some very interesting cases, which have not yet been fully studied, of urinary insufficiency in newborn babes.

Quantity.—The quantity passed in childhood varies according to age. The researches of Dohrn, Martin, and Ruge, for example, give from 8 to 9 cubic centimetres as the amount of each vesical evacuation in the newborn child, but according to Berti it is not possible, from variations in these amounts, to affirm anything as to the health of the child, nor do they indicate anything respecting the secretion of the following days. All that can be affirmed as a general proposition is that in relation to every kilogramme of weight the newborn infant passes four times as much urine as the adult. In the first five days the nocturnal emission seems to be less than the diurnal emission. During the first ten days the quantity is about 50 cubic centimetres each time and increases with the increase in suckling if the latter is done in a regular manner. According to the data of

Parrot, Cruse, Comerer, Martin, Ruge, and other observers, between 200 and 500 grammes are the average diurnal quantity of urine of a child aged from one month to two years. In sixty children of both sexes, from six to fourteen years old, Herg found from 550 to 1400 cubic centimetres to be the daily quantity, and Camerer found from 619 to 1034 in individuals from two to eleven years old.

Average Quantity of Urine secreted at different Age Periods (Vierordt).

Age.	Sex.	Number of cases.	Average weight of the body in kilogrammes.	Quantity of urine within twenty-four hours.	Quantity of urine for each kilogramme of weight of the body.
3 to 5 years old ...	Boys.	4	13·82	743	53·03
3 to 5 years old ...	Girls.	4	14·73	708	48·0
6 years old	Boy.	1	15·1	1209	78·0
7 ,, ,, ...	,,	1	22·42	1055	47·06
11 ,, ,, ...	,,	1	2·4	1815	75·64
13 ,, ,, ...	,,	1	32·69	756	23·12
Adults	—	—	63·0	1700-1800	28·0

The *number* of micturitions during twenty-four hours in nurslings is from six to ten, and with a certain amount of practice the quantity can be estimated by examining the napkins. However, in cases of choleriform enteritis and even of intestinal catarrh the fæces become liquid and present an aspect identical with that of urine, and in order to distinguish them from the urine it is necessary to recollect that the stain of the vesical excretion has no regular configuration, spreads indeterminately through the cloth, whilst the spot formed by the fæces is more or less circular and central. From the quantity, frequency, and ease in micturition some symptomatic indications can be inferred. Incontinence is normal in the first months of life. The healthy child which thrives on suckling generally passes urine and sleeps as soon as it leaves the breast of the nurse. With rare exceptions, as in meningitis and occasionally in dothienenteritis, retention is rare in childhood according to Roger. Retention occurs in surgical lesions of the urinary organs as it does in hysteria, in which there is likewise oliguria or polyuria. Dysuria is generally manifested in the course of pyrexia or is caused by phlegmasia or congenital diseases of the urethra, by phimosis or adhesion of the nymphæ. Pollakiuria is not peculiar to children. Vogel describes a spasmodic ischuria which is frequent in the first periods of life in little patients who suffer from intestinal dyspepsia. A reduction of the volume of urine is present in cardiovascular asthenia, in hyperthermia, in diarrhœa, specially in infantile cholera, and in partial impermeability of the kidney, as in uræmia from nephritis. The contrary phenomenon—polyuria—which was formerly considered as rare, is shown by modern research not to deserve this epithet. It has been observed that after the re-absorption of extensive dropsies in nephritis, in saccharine diabetes, and in insipid diabetes, which is chracterised by polydipsia and simple polyuria, the urine may attain the quantity of ten litres in twenty-four hours in children eight years of age.

Observers in Brazil assert positively that anuria is very seldom found in cases of yellow fever in children, but Juan Guiteras, who, in Guatemala, studied icteroid typhus fever, thinks that anuria is only less frequent in the child than in the adult. This symptom may also appear in diphtheria as a precursor of death: albuminuria, vomiting, suppression of the urinary secretion and fatal issue—such is the ordinary succession of the phenomena according to Goodall. Enuresis—an involuntary and nocturnal emission and sometimes diurnal—is peculiar to childhood, and it is not rare to see it continue until puberty. It is the business of the practitioner to ascertain its causes, which sometimes depend on neuropathic inheritance (or transmission), at others on affections of the cerebro-spinal axis and of the urinary system and even on saccharine diabetes. The incontinence observed in female children is ascribed by Marion Sims to smallness of the bladder, caused by hypertrophy of the muscular coat and by the consecutive diminution of its capacity. Dr. Townsend, who some time ago called the attention of practitioners to incontinence of urine in young children[1] and to its multiple etiological factors, has collected in a recent work some 100 critical observations. Fifty of each sex were patients from two to fourteen years old, 48 had nocturnal enuresis, 2 diurnal enuresis, 47 had the two kinds of enuresis, and 3 added to this rectal incontinence. Dr. Townsend indicates the following causes in the 100 patients whom he observed. I. Malformation of the bladder and urethra: epispadias, narrowness of the meatus, 2. II. Atony of the vesical sphincter: general weakness and anæmia, 17. III. Incontinence through reflex irritation—(*a*) increase of the quantity of urine: nephritis 1, diabetes 0; (*b*) alteration of the quality of urine: excess of urates and of uric acid 2, excess of acidity 3; (*c*) vesical calculus 0; (*d*) hyperexcitability of the genitals proceeding from—phimosis 11, adherence of the prepuce with or without retention of smegma and balanitis 22, vulvitis 1, masturbation 1; (*e*) irritation of the anus: through intestinal worms 6, eczema 1, polypus of the rectum 1; and (*f*) irritability of the bladder from unknown causes 31. Freud found at least in half the patients suffering from enuresis an exaggeration of the muscular tonus of the lower limbs. The child being seated naked on a table if an attempt be made to separate the legs, which are hanging down, the separation is attended with great difficulty; and, left to themselves, the limbs come into collision violently, the heels knocking against one another.

Density.—The urine of the newborn child collected by catheterism was found by Dohrn to give a density of from 1002·8 to 1006·0. Biedermann fixed the following figures for the first ten days of life: first day, 1010·0; second day, 1010·0; third day, 1009·0; fourth day, 1004·5; fifth day, 1006·0; sixth day, 1004·8; seventh day, 1005·5; eighth day, 1003·7; ninth day, 1002·4; and tenth day, 1002·7. From the first week the specific gravity diminishes in proportion as suckling is regular, and although the figures given by Bischof, Camerer, Hecker, Picard, and others are still too imperfect to lead to a definite conclusion, it seems certain that the density of the urine in the first and second periods of childhood does not attain the average figure of the adult. The variations appreciable by the urinometer in disease, nervous affection, nephritis, &c., have no semeiological significance in the child, for the density follows proportionally oscillations in amount of urea. Martin and Ruge recommend that in early childhood the coefficient 2 or 2·33 (according to Hasser) which is used in the calculation of solid substances in the urine of the adult be replaced by 1·6.

Colour.—The colour of the urinary liquid becomes darker from pale yellow in the newborn child as the child loses its weight and turns to its original hue after the sixth or eighth day. The urine extracted by catheterism in the first week is paler than that which is passed naturally. This fact is recorded by Martin and Ruge, and Professor Vierordt, relying on experiments made at the Kaupp Institute, explains it in the following manner. When little water is passed there is much absorption by the bladder of the water contained in the urine and the latter thus does not remain so clear. Respecting the significance of the changes of colour there is nothing to modify in what is known on these in the adult. Bile dyes the urine greenish; the blood—red with several changes; santonine—dark yellow, which is soon transformed into carmine; methyl-blue—light blue; carbolic acid,—black, &c. In physiological conditions the urine is clearer during the period of suckling than after weaning owing to the change of diet.

Transparency.—The transparency diminishes much in the first days of life, because the urinary liquid contains sediments with vesical epithelium, uric acid, and even albumin, but this perturbation does not last long and it has no pathological character. When left to itself the child's urine gets opaque more easily than the adult's; this is caused by the growth of inferior organisms.

Odour.—In proportion to the age, from inodorous in the newborn babe it gradually acquires the peculiar smell it has in the adult.

Reaction.—The urine of the nursling, which is generally neutral or occasionally alkaline on the first day or first few days which follow the birth, according to Professor Parrot appears nearly always neutral, and acidity, however slight it may be, must always make one suspect a defect in the alimentary

[1] Archives of Pediatrics, 1887.

system of the child. Cruse accepts this statement, whilst Martin and Ruge describe a slight acidity in three-quarters of the cases in fresh urine at the first and in the remainder of his observations a feeble alkalisation or a neutral reaction. The "urina sanguinis" is more acid than that passed during the day, which is called "urina potus," and the acidity is frequent in sclerema and in infantile atrophy.

Urea.—Dohrn found thirty-six milligrammes of urea in the bladder of a child which was just born, and Martin and Ruge determine the following quantities during the first ten days of life:—0·0763, 0·0783, 0·2504, 0·1827, 0·1358, 0·1817, 0·2567, 0·2284, 0·16240, and 0·1505. The urea goes on diminishing progressively with lactation, although it is relatively very plentiful up to the first month (0·80 for a litre per kilogramme of child, according to Parrot) and amounting during the third week to 1 gramme and 1·89 grammes. Until eleven years of age Camerer determined from 11·1 grammes to 15·1 grammes, and generally speaking we may assert that from the second year up to puberty the figure is 1·7 per cent., and therefore it is less than in adults. The urea—which has in the child the same physiological signification as in the adult—is likewise influenced in its production by indigestion of albuminoids as Schabanowa demonstrated. However, the newborn babe, swallowing in twenty-four hours twice as much nitrogen as the adult, excretes in urine six times less, although there is approximately the same amount of oxygen. "He burns less, absorbing more fuel and the same quantity of oxygen," the daily increase of weight explaining this excess of assimilation over de-assimilation. Temperature acts also in influencing the amount, so that the colder the newborn babe becomes the less urea he excretes. Respecting weight, however, we must observe with Professor Parrot: "Generally speaking, the urine of children from one to thirty days old contains per litre so much the more urea in proportion as the weight is greater: but although rising in the same way the urea does not increase in proportion with the weight, so that a heavy child will give per kilogramme of its weight less than a lighter child, although the quantity of urea, estimated in litres, is more considerable in the first case." Besides diseases common to the adult urine deposits urea in athrepsia and sclerema. Azoturia is common, but not the hypo-azoturia, which, according to Money, forms a feature of the symptomatology of gastric catarrh, the skin losing its elasticity as in infantile cholera.

Uric acid.—A regular element in the urine of the newborn babe, which increases during the first three days and diminishes afterwards, is uric acid. And in spite of oscillations during twenty-four hours at that epoch it is certain that the proportion between this product and urea is greater than in the previous period, although the proportion between the acid excreted and the weight of the body is approximately the same in the adult as well as in the child. Derivatives of uric acid are found in a newborn child's urine such as urates and allantoin. Wohler determined their presence, in the same manner, in the urinary excretion of animals which were just born. Sometimes in the fœtus, although oftenest in the child from the first to the seventh day, there exist in the kidneys, never in the cortical substance, in the lower half of the pyramids, converging towards the hilus, more or less notable sediments of light yellow or dark yellow material. These sediments, which obstruct some straight tubes and which are moulded by them, constitute the infarcts of uric acid spoken of by Virchow, and which besides this substance contain oxalate of ammonia and epithelial detritus. It appears that the opinion which at first attributed these infarcts to albuminuria is gaining ground again, and Sutherland even thinks that other forms of albuminuria (called physiological) of childhood, such as the cyclical, the albuminuria of adolescence, and even paroxysmal hæmoglobinuria, must belong to the uric diathesis. West asserts, and it is a current doctrine, that under the action of cold, of gastric disturbance, of fever, and probably of an hereditary tendency, it happens frequently that the urine of children deposits uric acid. Such sediments are transitory and may cause colic and dysuria or even suppression of excretion for some hours. Bokai thinks that the irritation of the neck of the bladder by free uric acid together with the renal infarcts are two of the etiological factors of the state described by him under the name of vesical spasm, which Vogel calls spasmodic ischuria, and which West and several writers describe. It is the cystospasm, the "Blasenkrampf" of the Germans. Bouchut is of opinion that the uric gravel of the first days of life is physiological, but disappears afterwards. The frequency of calculus in childhood is well known, and by this may be understood the variable intensity with which the uric diathesis appears at that age, and which Sutherland thus describes. It is seen in children of special conformation, who are lean, nervous, have disturbed sleep and exaggerated senses, are very sensitive to cold, and perspire on slight cause. As objective signs we observe an irritable pharynx, the tonsils and adenoid tissues are hypertrophied, there are headache and intestinal catarrh with furred tongue, the spleen and the liver are enlarged, the pulse is weak, slight, and irregular. A symptom of great value is the pain which accompanies the excretion of uric acid; this pain may be seated in any part of the urinary system or umbilical region, and may be piercing, like that of renal colic in the adult, and may even awake the child, who begins to cry with anguish, and who has nausea and vomiting. According to the analysis of Gauthier the urine of children nourished by a wet nurse contains more uric acid: deposits of that substance are found in the form of brick-coloured sand in the folds of the napkin or at the bottom of the chambers.

Hippuric, oxalic, benzoic acids, and creatinine.—The urinary liquid first passed contains very small quantities of oxalic, hippuric, and benzoic acids and its compounds, but the presence of some of these in the urine of the newborn babe is denied by Cruse. It is known, and I repeat it, that oxalate of ammonia enters into the composition of the infarcts of Virchow. Hofmann says he never found creatinine.

Colouring matter.—A few years ago there was much work done respecting the presence of indican in the urine of tuberculous children. The initial work belongs to Hochsinger of Vienna, who endeavoured, in a remarkable communication, to demonstrate to the Pædiatric Congress of Bremen in 1890 that urine which is rich in indican among children from one to six years old is a symptom of tuberculosis. The great importance of such a statement would have been marked if later observations had confirmed it, and hence the interest attaching to Krause's researches. In this research is to be found a detailed report of the cases which served as a basis for Hochsinger's conclusions. We see from that monograph that in the majority of the cases there was only one application of the tests for indican, and the experiments of other authors gave results opposed to those of the famous Vienna physician. W. Steffen, among 19 children from one and a half to fifteen years old who were clinically and bacteriologically tuberculous, examined the urine 1203 times, and in these analyses he failed to find indican 718 times, he met with traces in 195 instances, small quantities in 146, average quantities in 86, and in 58 large quantities. This difference in results may be ascribed to the difference of age, but Steffen divided his cases into groups, and in the first group of 9 children from one to six years old, like those of Hochsinger, 654 examinations of urine gave the following data: 372 times no indican at all, 120 times traces, 94 times little indication, in 42 instances an average quantity, and in 26 a large quantity. On the other hand, Voute, using Jaffe's method modified by Stokvis of Amsterdam, submitted to examination the urine of 71 children from one to nine years old, divided into two series. The first series, composed of cases of latent and masked tuberculosis and of scrofulosis, gave in 51 analyses for 37 cases: no reactions at all, 13; weak reactions, 27; average, 15; and marked, 6. In the second series of 34 cases the urine of children suffering from diseases of the digestive system &c., being analysed 42 times presented 10 cases without reaction, 11 weak, 10 average, and 11 marked reactions. C. Giarré, using Jaffe's and Obermeyer's method, sought for indicanuria in 49 children from one to ten years old who were evidently tuberculous, and these are the results which he describes. 1. Traces of indican are found in children's urine in several diseases, among which is tuberculosis. 2. The increase of indicanuria may be observed either in tuberculosis of the first period of childhood or of the second, and chiefly in relation to serious entero-peritoneal lesions, pulmonary cavities, and acute miliary tuberculosis, but this relation cannot be considered regular. 3. The increase of indican in the urine may even be wanting in the most typical forms of tuberculosis of the first period of childhood. 4. A remarkable increase of indicanuria may appear in children, no matter how old they are, in other diseases which involving the digestive organs or other parts of the body increase or facilitate the decomposition of

albuminoids. 5. Non-tuberculous athrepsia and chronic lesions of the respiratory organs which are not specified, of which the diagnosis from tuberculosis offers difficulties, may be accompanied by indican in the urine. Money, while investigating affections of a non-tuberculous nature, found indican to be frequent in albuminuria, in diseases of the intestine, and in serious inflammatory diarrhœa, contrary to Senator, who declares indicanuria to be very rare in childhood. Steffen determined its absence in 5 healthy new-born children, and in patients from one to six years old he obtained these proportions: diphtheria and typhoid fever (which, it is well known, is mostly mild in the child), 1:5; measles, 1:3; and in 60 cases of pneumonia, bronchitis, kidney and heart affections, rachitis, and enteritis indican was found scantily 13 times. Nomidlowski—studying indicanuria in the famous laboratory of Epstein, to which pædiatrics owes so much—found its reaction in the urine soon after birth, even in the absence of digestive disorder, and he observed it also, although very seldom, in suckling babes who had mother's milk. In sucklings fed on mother's milk and cow's milk, still without apparent gastro-intestinal disorder, indican is frequent; the latter has always been found in gastro-enteric disorders, and the gravity of these disorders is in direct proportion to the intensity of the indicanuria. In the second period of childhood indican has the same semeiotic value as in the adult. The same observer affirms that there is no relation at all between indicanuria and infantile tuberculosis. This is also affirmed by Gehlig in his work presented to the Congress of Rome. Respecting other points he says: (*a*) healthy suckling babes who are fed with sterilised milk and who are not subject to digestive disturbances sometimes present traces of indican in the urine, and (*b*) if digestive disturbances take place indican is nearly always found, and its quantity increases with the gravity of the disease. Indicanuria is particularly prominent in chronic catarrh of the intestines, in cholera, and in typhoid fever. In older children not suffering from digestive derangement the urine contains normally some indican. If the diet contains much nitrogen the indicanuria becomes more marked. Jahn is still one of those who do not attach the least value to the presence of indican in the urine for the diagnosis of infantile tuberculosis. The figures given by this author are striking; he studied the reaction in surgical tuberculosis in the laboratory at Bâle. He found normal urine or urine with traces of indican in 38 per cent. of cases with multiple lesions and in 39·4 per cent. of cases with one focus. This proves that the extension of the lesion has no significance. When indicanuria was marked the percentage appeared also little higher in the cases with multiple foci. Jahn affirms, however, that indicanuria is more frequent in tuberculosis than in other affections. Miss Lioubitza Djouritch asserts this much more decidedly in her thesis, of which I transcribe the conclusions. 1. Indican exists in a normal state in the urine, but in such a small quantity that indicanuria may be considered as pathological, especially in children whose diet has less nitrogen than that of adults. 2. As the indican proceeds from indol, indicanuria will manifest itself chiefly in diseases which are accompanied by an over-production of indol. 3. This extra production takes place chiefly in diseases of the digestive tract, acute and chronic. 4. Indicanuria is found also in certain acute diseases such as typhoid fever, pneumonia, bronchitis, chorea major, and diphtheria. 5. It is constant and permanent in tuberculosis. It appears, then, that there is a close relation between tuberculosis and indicanuria. This fact is of some importance in cases where the diagnosis of tuberculosis is difficult. 6. It is not easy to give an explanation of its appearance in tuberculosis when there are no digestive disturbances. It can be explained to a certain extent by the profound disorder of general nutrition which manifests itself in the course of tuberculosis. Of all the investigators quoted, only Djouritch supports the observations of Krause and Hochsinger. Steffen, Voute, Giarré, Jahn, and Gehlig operating in different conditions are opposed to the special significance of indicanuria in the diagnosis of infantile tuberculosis. It does not seem to me that the matter needs much revision in order to establish a final conclusion, since I incline to the opinion of the majority of the observers; however, I presume that not sufficient stress was laid upon the alimentary or morbid factor which causes tuberculosis without apparent gastro-intestinal lesion to be marked by indicanuria. This is the point upon which the light of further critical researches must be projected.

Toxic power.—Solaro made experiments in order to determine the toxic co-efficient of the urine of healthy children. Injecting into the veins of rabbits the urine of a girl three years old, of another four years old, of one eight and a half years old, and of one ten years old, he observed that the toxic quantity per kilogramme of animal was always higher than the average of 45 cubic centimetres, which was established in such cases for the urine of the adult. Chamin, employing urine of suckling babes fed with mother's milk for injections in rabbits, found that 82 cubic centimetres per kilogramme were sufficient to kill an animal. The urotoxic co-efficient would be then 0 900 and within twenty-four hours a new-born babe would excrete enough urine to intoxicate an animal of equal weight. I do not know of any work in pædiatrics dealing with the special determination of the five poisons of Bouchard, which are still imperfectly studied, and of urea and of potash considered from this point of view.

Chlorides, phosphates, and sulphates.—In nurslings there is always a small quantity of phosphates, of chlorides of sodium, which vary with alimentation. There are also in various proportions sulphates of sodium, potassium, calcium, and magnesium, which Lehmann and Lecanu believe to exist abundantly. In rickety subjects azoturia and excretion of phosphates go together, apart from the therapeutic influences which cause these urological figures to vary (Bezy). Mongour observed, after injections with anti-diphtheritic serum, a reduction of chlorides and an increase of density, of diuresis, nitrogen, and phosphates. In athrepsia there is a great abundance of phosphates, but investigations upon free sulphuric acid at present show nothing.

Albumin.—As regards albumin, we find that the attention of investigators has always been attracted by a product whose significance has in childhood a special feature. In the child, indeed, cases of so-called physiological albuminuria are more frequent and the physician must know this in order to avoid great mistakes in his diagnosis. Martin and Ruge found albuminous urine in new-born children without lesion in the kidneys; and Mensi, in a hundred observations at the same age, found albuminuria nearly always and in a proportion of from 1 to 30 per cent., whilst after the fifth to the tenth day of life the phenomenon does not recur. Dohrn had already described albuminuria in the first hours of extra-uterine existence; this appears to be now incontestable in spite of the negative results obtained by Robin and Parrot in sixty children examined. The phenomenon is explained by Martin, Ruge, Virchow, Henoch, and Baginsky as due to infarcts of uric acid; Ribbert, like Lecorché and Talamon, believes it has something to do with the persistence of the fœtal state of the glomeruli and the continuance, therefore, of the process of renal transudation; and, finally, Bartels believes that in the interval which divides placental respiration from complete pulmonary respiration there is a diminution of oxygen so that intra-organic oxidation does not produce uric acid and in consequence is incompletely effected. Dohrn, Martin, and Ruge found in this albuminuria but a small quantity of albumin. Cruse never found it beyond the tenth day, but Ribbert says it may be considerable. Such an albuminuria, of which the pathological importance is *nil*, is said by Bartels to coincide usually with a certain degree of renal hyperæmia that does not otherwise affect a favourable prognosis. But in the new-born babe also albuminuria appears sometimes as a symptom of acute nephritis or of the very uncommon chronic idiopathic albuminuria of West, of which the anatomical basis may even amount to the white kidney, of which the gravity is well known. Nervous and hereditary albuminuria and that which is caused by the action of certain medicaments also belong to the so-called physiological albuminuria. In the category of nervous and hereditary albuminurias are included nearly all those in which there seems to be operating a cause apparently of little importance upon an hereditarily morbid ground—i.e., on the one hand, the uric diathesis, as is now being generally admitted, and, on the other hand, the neuroses; these elements are sometimes combined. We have, for example, intermittent albuminuria and the albuminuria of adolescence of English authors. The first-named is characterised by dyspeptic disturbances, of which generative disorders are the etiological factors; it is the type found by Furbringer 9 times and by Leroux 19 among 60 and 330 children respectively from three to six years old

and upwards. It appears sometimes only in the morning, and in another group from one to two hours after meals (because of the incomplete combustion of albuminoids, according to the assertion of Dluski); it is the "cyclic" albuminuria of youth of Pavy, the albuminuria of growth of Eichhorst. Analysis never gives more than one gramme per litre, and the prognosis is always favourable. The albuminuria of adolescents, which is confounded with that of Eichhorst, manifests itself after muscular exertion and is believed sometimes to be caused by brain work, by over-study in schools. Besides this albuminuria, which is so frequent in neuropathic as well as in arthritic subjects, albuminuria appears transiently after baths and in the course of nervous affections. Cantharides and tincture of iodine, according to Jules Simon, and turpentine, copaiva, and cubebs cause the urine to become albuminous, and the same thing happens in persons with scabies due, says Unna, who is cited by Dluski, to the hyperæmia of the kidneys by cutaneous irritation favoured by vasomotor disturbances. In impetigo, in angina, in eczema, and in stomatitis albuminuria may appear without nephritis. According to Legendre this albuminuria is caused by disturbance of digestion with auto-intoxication and hepatic insufficiency, the latter producing—through the non-destruction of albuminoids and the non-detention of intestinal poisons—irritation of the liver. Except in circumstances lately determined it is very often difficult to say if the albuminuria depends or not on a serious kidney lesion, although this is easy in each individual case, thanks to the various characters of the albumins which are examined. In scarlet fever especially, and notwithstanding the studies of Sanné, there are still those who admit the principle of a normal simple albuminuria. Acute infectious diseases generally cause albuminuria to appear, slight and transitory, and this happens in eruptive fever, in typhus fever, in Siam disease, and in pneumonia; but it is also certain that, at a given moment, even in these morbid states the kidney may be very much injured, and analysis of the urine may have another signification. Nor do authors agree even respecting the temporary albuminuria of infectious diseases, which Lecorché and Talamon believe to be less frequent in the child than in the adult. In dothienenteritis Gubler always found it, Leube in 22 per cent., and Ekkert in 73 per cent. of the cases; while Geier recorded 25 observations, and in every one of the cases there was nephritis, the albuminuria manifesting itself from the third day to the second week. In one of his valuable studies Binet always found this product in pneumonia and broncho-pneumonia, in 1 per cent in pleurisy, in half the cases of tuberculosis of the lungs, and in two thirds of those of tuberculous meningitis. Albuminuria appears also in diseases of the digestive system from intestinal catarrh to cholera, in some quinsies, in nephritic colic, in athrepsia, seldom in rickety subjects, in tuberculosis, in leukæmia, and in atrophy. C. Ferreira asserts "the great frequency of albuminuria in the febrile and apyretic malaria of children, in which very often the course of the phenomena closely corresponds to that of diffuse nephritis." Diphtheria affords an example of a transition between albuminuria due to functional and that due to organic disease, since in this disease in serious cases the presence of albumin in the urine is not by itself a proof of invasion of the kidney; but this may happen occasionally some authors even admitting a primary diphtherial nephritis. Children may be attacked with acute nephritis and Bright's disease, and the examination of the urine yields the same indications as to albumin as in the adult; the frequency of secondary, and especially of scarlatinal, nephritis is remarkable, cases of renal degeneration even in the first periods of life not being, however, very rare. Albumin is a constant element in chyluria. Respecting other albuminoid matters existing in the urine of the child researches are not numerous.

Hemialbuminose.—Hemialbuminose or propeptone, which appears sometimes in those suffering from Bright's disease, was found by Loeb in measles. In this febrile exanthem, "under the action of diazo-benzol, which is formed in the urine by the mixture of sulphanilic acid, of nitric acid, and of nitrite of sodium, the urine being saturated by ammonia assumes a characteristic scarlet colouration which tends a little towards orange colour" (Baginsky). Such a reaction is not connected with the fever, although it is generally more prominent on the disappearance of the fever, but it seems due to propeptone.

Peptone.—In 248 children Binet found peptone in the urine 34 times—viz., in 5:28 pneumonia, 1:2 purulent pleurisy, 1:2 severe febrile roseola, 10:37 diphtheria, 3:21 suppurations, 1:26 athrepsia, and 13:23 nephritis. Except two, in all the other cases there was simultaneous albuminuria, and peptone was always more frequent in the severe forms of diphtheria and nephritis. The researches of Arslan tend to prove the presence of peptone in the urine of those suffering from scarlet fever. I do not know, however, of any works establishing the importance of the various kinds of peptonuria in diseases of children, the nephrogenic, the pyrogenic, the hæmatogenic, &c., of Senator, Jaksch, Fischer, and others.

Fibrin and hæmoglobulin.—There is nothing special to note respecting fibrin. Hæmoglobinuria manifests itself in a disease peculiar to the new-born child—viz., the very grave affection described by Winckel under the name of pernicious icteric, apyretic cyanosis with hæmoglobinuria. Analysis of the urine shows, also, the presence of that product in syphilis, where Reale found it in children twenty-two months old, in poisoning by chlorate of potash, arsenic, or sulphuric acid, in chills, according to Demme and Lichtein, in scarlet fever according to Heubner, and in certain forms of malaria, as grave bilious fever, in which, as Laveran asserts, the microscope does not reveal corpuscles, but spectroscopic analysis shows hæmoglobin. In the paroxysmal and intermittent form Mackenzie believes hæmoglobinuria to be the expression of paludism and Sutherland of the uric diathesis, whereas it is sometimes explained by the presence of nematoids (rhabditis, Baginsky); in other cases its pathogeny remains obscure.

Mucin.—To the existence of mucin, which is always present in the urine of children of the earliest age, is ascribed by Cruse the fact that some observers have mistaken mucin in the urine for physiological albuminuria after the first ten days of life.

Sugar.—Grape sugar was found by Pollack in the urine of suckling babes, but researches by others, especially those of Bouchard and Parrot, tend to invalidate those studies. I must say, however, that the matter does not seem to me to be exhausted, especially considering the imperfect results which are given by the reaction with the cupro-potassic solution, in view of the very delicate tests with naphthol and chiefly phenyl-hydrazin. Examining with such means the urine of 51 healthy children from three to twelve years of age, Binet found in half the cases a quantity of glucose amounting to a minimum of 0·20 per cent., and in the remainder found slightly less or only doubtful indications. Grosz proposes to study in the clinical school of Epstein the following questions. In what condition is glycosuria found in suckling babes and what is the nature of this sugar? Is there in early childhood an alimentary glycosuria such as is found in the adult? Very numerous researches were made among children from one day to four weeks old; 24 were healthy, 12 had chronic or acute gastro-enteritis, 10 were dyspeptic, 1 was hydrocephalous, and 1 was born prematurely. As a result Grosz asserts that glycosuria does not appear in new-born babes in the physiological state, but "in certain digestive disturbances the urine contains a reducing substance, not fermentable, possessing sometimes rotatory power to the right, and giving very quickly positive results with sugar reagents; this substance disappears or persists for some time." In view of the studies of Dastre, who admits that milk sugar is transformed in the intestines into galactose through a special ferment, or in view of the studies of Escherich, who accepts as a factor in that organic operation the bacterium coli commune, it is easy to understand that the glycosuria of children who suffer from digestive derangements is due to the non-transformation of the sugar in the intestines and to a decrease in the power of assimilation. Grosz determines other interesting points which cannot be included in this paper, and affirms as a practical conclusion the presence of glucose in disorders of the infantile digestive system, alimentary glycosuria, probably of milk sugar and its derivatives. Saccharine diabetes was until a few years ago nearly unknown in children when Kulz's statistics (111 cases) showed that this disease ought not to be considered such a rarity in children from six months to fifteen years old. Many facts are now available in science by Cantani, Jules Simon, Winckler, Berg, and Borgesio, who believes in a predilection of the disease for females. The quantity of glucose may be considerable in saccharine diabetes, of which the progress, asserts Steiner, is faster in proportion as the patients are younger. Grape sugar has been observed, however, in other diseases.

Demme showed it in pseudo-hypertrophy of the muscles, and Zimme in convalescence from scarlet fever, but in the latter Binet thought it was very seldom found, which contrasts with the frequency, as he shows, of diaceturia in that exanthematic pyrexia. And from 332 analyses by that observer of the urine of 161 sick children he concluded by showing the presence of glucose in grave diphtheria (27 times out of 38 cases), slight in tuberculosis and in nephritis (once in 16 cases). The constancy of glucose in the urine of grave diphtheria is ascribed by Binet not only to the profound intoxication of the disease, but also to asphyxia, since Droski demonstrated that a great number of substances provoke the increase of sugar, diminishing the quantity of oxygen, its fixation in the blood and its assimilation by the tissues. In this manner the field of asphyxial glycæmia must be enlarged, and, moreover, in diphtheria, as Regnard and Quinquand assert, the respiratory capacity of the blood is very limited, the latter imbibing 100 c.c. per litre, while in the individual in health that relation is represented by 240 : 1000.

Diaceturia.—As a symptom foreshadowing coma in saccharine diabetes Jaksch recorded the elimination by the urine of acetic acid, its ethers, and its salts, a phenomenon which also presented itself to the author in various diseases and even as an independent morbid type which he called "diaceturia." The reactions of Gerhardt and Luhal are used in the analysis, and according to the assertions of Baginsky and Junon, excepting diabetes, diaceturia does not carry with it any serious prognostic meaning. Binet, who made a remarkable study on the matter, saw diaceturia 69 times in 150 children examined, 19 : 23 being pneumonias and broncho-pneumonias, 16 : 26 measles, 27 : 34 scarlet fever, 4 : 4 erysipelas, 11 : 31 diphtheria, 2 : 13 suppurations, 2 : 4 typhoid fever, 2 : 4 tuberculous meningitis, 1 : 1 perityphlitis, 1 : 1 extensive burn, 2 : 15 acute nephritis, and 1 : 1 tumour of the iliac chamber. In the statistics the frequency of the reaction in eruptive fever is noteworthy.

Acetonuria.—It follows from the experiments of Baginsky that among healthy children acetonuria is constant and without semeiotic importance. It is a substance very common in the urine in cases of eclampsia and with the temperature at 38·8° C., vanishing with the disappearance of the fits and with the disappearance of fever.

Diazo-reaction.—In the hospital of St. Isabel in St. Petersburg Dr. Nissen studied the importance of the diazo-reaction among children. The patients, who numbered 462, were children from six months to sixteen years old, and the urine was submitted to analysis 2,500 times, the result being the certainty that the reaction is constant in measles, in typhoid fever, and in miliary tuberculosis, existing or not in chronic pneumonia, in croup, in pleuro-pneumonia, pleurisy, laryngitis, tuberculous meningitis, diphtheria, erysipelas, and scarlet fever, and always lacking in other affections of the infantile nosology. In some diseases there are interesting peculiarities. In measles the reaction is constant—sometimes in the premonitory period, but nearly always preceding the eruption from twenty-four to forty-eight hours; this serves as a basis for the differential diagnosis from rötheln in which the diazo-reaction is absent. The latter persists throughout the fever or is co-existent with the morbillose exanthema or lasts longer than them. In scarlet fever the same thing does not happen and since the reaction coincides with the exanthem its diagnostic value is null. In abortive typhoid fever the diazo-reaction does not exist. In its other forms the characters are similar to dothienenteritis of the adult. In croupous pneumonia it has no diagnostic importance. In pulmonary tuberculosis there are three hypotheses to take into consideration. 1. The diazoreaction is wanting or it appears at very distant epochs and it is little noticed. This is the case with caseous pneumonia and with the formation of caseous foci and cavities. 2. The diazo-reaction appears at epochs more or less distant and ends by establishing itself finally a few months or a few weeks before death. This occurs in caseous pneumonia, accompanied with miliary tuberculosis. 3 The diazo-reaction is absent when bronchitis passes into a catarrhal pneumonia, afterwards it appears suddenly, very markedly, and continues until death. This is the case with miliary tuberculosis of the lungs. The diazo-reaction may then acquire a diagnostic value in certain cases of pulmonary tuberculosis, where diagnosis may be difficult." In 15 cases of meningitis there was reaction in 10. The other cases were composed of 2 of meningitis affecting the brain and spinal marrow and of three of single meningitis.

Histological elements; pus.—Pyuria has the same signification as in the adult, excepting that described by Gee in childhood and temporary, with symptoms of cystitis and inevitable incontinence. The cessation of pyuria through the obturation of the ureter of the injured kidney is one of the most remarkable symptoms of suppurative pyelitis. The cells which are frequent in the infantile urine offer a character similar to those indicated in the urology of the adult.

Blood.—Hæmaturia may arise from various causes: in hæmatochyluria, of which the parasitic origin is so well known, in cancer or lithiasis of the kidneys; in purpura, in chronic enteritis, in some eruptive fevers, in acute infectious diseases, in Winckel's disease, and in the dyscrasia peculiar to the new-born child, and the pathological substratum of which consists—according to Beckmann and contrary to Pollock—in the accumulation of corpuscles in the tubes through "thrombosis" of the vessels of the kidneys and consecutive extravasation. J. Thomson saw hæmaturia in a child two years old suffering from scurvy, Monti saw it in a child affected with a chronic eczema and itch or in suckling babes who took a sulphurous bath daily during more than an hour. And, finally, in every hypoæmic state of the kidneys streaks of blood in the urine as well as in traumatic lesions of any point of the uropoietic system. The examination for the determination of germs (Koch's, Löffler's bacillus, &c.) is made according to the well known rules of bacteriology.

The urine in various forms of disease.—In acute congestion of the kidneys which is the anatomical process corresponding to acute infection there are found renal epithelia, more or less disfigured, hyaline casts, a little albumin, and corpuscles, the presence of the latter depending on the existence or non-existence of hæmorrhages. In passive congestion albumin appears also in small proportion, the volume of urine decreases, it is reddish, and there is an excess of urates. In nephritis generally the colour of the urinary liquid which is acid varies very much; it contains hæmoglobin, albumin, blood corpuscles, hyaline casts, fat and renal epithelia, crystals of uric acid and detritus. In scarlatinal nephritis there are cases (like the one published by Litten, related by Henoch), in which albuminuria is absent for a long time, without, however, the disease disappearing. In pyelo-nephritis the urine is alkaline, and there are abundance of albumin, pus, large numbers of bacteria and granulo-fatty detritus. Monti has insisted lately upon the study of the infantile pyelitis, which he considers to be very rare. It is produced often by calculus, seldom by parasites, by echinococcus, by the decomposition of urine retained by obstruction due to hypospadias or phimosis, by the use of carbolic and salicylic acids, of Peruvian balsam and of turpentine, by acute infectious diseases, and finally by the migration of the gonococcus from vulvo-vaginitis to the calyx of the kidneys. The symptoms are: (1) fever, not permanent, but preceded with shivering when it exists; (2) cerebral phenomena in an acute state (somnolence, delirium, and violent cephalalgia); (3) pains, not permanent, but when existing being localised in the loins and irradiating towards the bladder and accompanied with frequent needs of urinating and of defæcating; (4) frequent vomiting in the first period, and continuing whenever there is an obstacle to the secretion of the kidneys; (5) the special character of the urine, which is chiefly distinguished by its purulence, its aspect, and acidity; (6) the urinary sediment, which contains pus, epithelial cells from the renal calyx, blood corpuscles and numerous bacteria; (7) œdema of the face, which sometimes may recur; and (8) emaciation, which in chronic pyelitis (?) is very great. Presenting an acute and chronic form (the later in most cases) infantile pyelitis is due mainly to calculus and rapid obliteration of the ureters. In rachitis, according to the observations of several authors, the quantity of phosphates, albumin, and salts of calcium is small, but lactic acid is present. In leukæmia there is an excess of uric acid, of hypoxanthin (?), hyaline casts, and albumin. In chyluria, which never occurs in the first period of childhood, the urine is acid, albuminous, white, coagulates easily, and has a density from 1005 to 1025. When treated with chloroform it grows red, presenting three well-defined strata after a few hours' rest; one at the bottom, which is whitish; the middle one is rose-coloured; and at the top one the urine is normal and clear. The albumin and the fat being extracted there is a formation of crystals

of nitrate of urea. The microscope shows blood globules and fat, hyaline casts, crystals of phosphates, epithelial cells, and embryos of filaria sanguinis hominis. In whooping-cough, according to a recent communication from Blumenthal and Hippus,[2] from the beginning to the acme of the disease the urine is pale yellow in colour, very acid, of high specific weight, and perhaps to exaggerated leucocytosis is due the remarkable deposit of free uric acid. For early diagnosis, which is always difficult, these characters of the urine in whooping-cough are very noteworthy, but they disappear under the action of antipyretic substances and of complications of the disease. In tetanus Oddo found indicanuria, phosphaturia with inversion (alkaline phosphates 2086 and earthy phosphates 0·17), and there was no albumin. This was observed in a child eighteen months old, whose disease had begun with anasarca and retention of urine. In chronic cases of gastro-enteritis in children Felsenthal and Bernhard[3] found single albuminuria or accompanied with hyaline and granular casts, epithelial matter, mucus, red corpuscles, leucocytes, and sometimes indican. Post-mortem examination showed the lesions of parenchymatous nephritis. In infantile splenic anæmia estimating uric acid by Haycraft's process, the following conclusions will be arrived at: (1) the quantity of uric acid is not in constant relation with that of the urea; (2) in febrile urine the uric acid reaches a maximum of 0·75 gramme per litre; (3) the average in febrile urine is 1·27 grammes per litre and in the apyretic is 0·67 gramme; and (4) the increase of uric acid in infectious splenic anæmia enhances the importance given to the theory according to which such is not a transitory form of the urea, but a product of the material exchange of the leucocytes. The urine must be carefully examined in the course of many diseases, specially in diseases of the uropoietic system, in scarlet fever, and diphtheria. The diagnosis of various affections of the uropoietic system in early life (hydronephrosis, nephritic abscess, &c.) is based on the same data as the adult. But it is necessary to say that cases of tumour of the kidneys can be easily recognised, because, owing to the distension of the colon in children, the colon is pressed against the abdominal parietes, where it remains in relief over the tumour and gives a tympanitic sound when percussed.

A CASE OF DEEP-SEATED TROPICAL ABSCESS OF THE LIVER TREATED BY TRANS-THORACIC HEPATOTOMY; RECOVERY.

BY BYROM BRAMWELL, M.D., F.R.C.P. EDIN.,
AND
HAROLD J. STILES, F.R.C.S. EDIN.

THE MEDICAL HISTORY OF THE CASE AND DIAGNOSIS BY DR. BYROM BRAMWELL.

A STRONG, muscular man aged twenty-eight years was seen with Dr. Curtis Whyte of Dalkeith and Dr. T. W. Dewar on Oct. 8th, 1895. The patient stated that he had enjoyed perfect health until about six years ago, when he suffered from a rather severe attack of gonorrhœal arthritis affecting especially the knee, both ankles, and the toes. During this illness he was confined to bed for nearly a month and was afterwards treated for some weeks at Buxton. The following spring he again suffered from rheumatism in both ankles and was again treated at Buxton. The rheumatism then gradually left him and he had been free from it ever since. In June, 1894, he went to Lagos on the West Coast of Africa. He described Lagos as a flat, swampy, stinking, fever-breeding place, with no safer water-supply than the rain collected from the roofs of the houses. A month after reaching the colony he was seized with fever of a malarial type; the febrile attacks recurred at longer or shorter intervals, and usually lasted for two or three days at a time. In April of the following year (1895) he was seized with a severe attack of dysentery. This necessitated his removal to hospital, where he remained three weeks. From hospital he was conveyed directly to the ship which brought him home. He derived great benefit from the voyage and stated that on his arrival in this country in June, 1895, he was perfectly well. He remained in good health until the end of August, when while away from home on a holiday he was attacked with severe dysenteric diarrhœa. He returned home looking and feeling ill. He was seen by Dr. Whyte on Sept. 4th. The diarrhœa soon yielded to treatment, but some days afterwards he began to complain of intermittent pains in the right shoulder and of a catching pain in the right hypochondriac region at a point corresponding to the junction of the sixth and seventh right costal cartilages with the sternum. The pain in the hypochondriac region was increased by taking a long breath, laughing, or yawning. It was so much aggravated by laughing that he was obliged to quit the room whenever there was any joking going on. This pain continued notwithstanding treatment. On the evening of Sept. 20th he was seized with a chill while out walking and on his return home he had a distinct rigor. The temperature ran up to 103° F. The rigor was followed by profuse perspiration. He was now kept in bed and placed on quinine—five grains four times daily. But as the febrile disturbance persisted in spite of the quinine, and as the patient complained on several occasions during the next fortnight of slight chilliness not amounting to distinct rigors, Dr. Whyte and Dr. Dewar began to suspect that he was probably suffering from an abscess of the liver, although no local signs of such a condition were discoverable. During this period night sweats were frequent; the temperature always ran up to 101° or 101·5° at night, but was usually normal in the morning; the appetite became poor, but the tongue remained clean; there was some loss of flesh. On Oct. 8th I was asked to see the patient in consultation with Dr. Whyte and Dr. Dewar. The most careful examination failed to detect any physical evidence of local disease. The abdominal and thoracic organs all appeared to be normal. The liver was not enlarged and there was no localised tenderness even on firm pressure over any part of the organ. The pulse frequency was only slightly increased; the respirations numbered 16 per minute; the temperature at the time of my visit was slightly below the normal; the tongue was clean, the appetite was poor, and the bowels were regular. The patient had, since his illness commenced, got a little thinner, but there was certainly no emaciation. The evening temperature had for some weeks previously been distinctly elevated; there had been several attacks of chilliness, followed by sweating and one definite rigor. Notwithstanding the absence of any enlargement of the liver and of any tenderness on pressure over the organ I agreed with Dr. Whyte and Dr. Dewar in thinking that the patient was in all probability suffering from an abscess of the liver. This opinion was based on the following line of argument: (1) that the patient was suffering from fever of a hectic type, gradual and progressive emaciation, and occasional attacks of chilliness, hardly amounting to distinct rigors; (2) that the febrile disturbance was irregular in type (in other words, not distinctly malarial), that it was uninfluenced by quinine, and that there was no definite enlargement of the spleen; (3) that the patient had suffered from severe tropical dysentery; (4) that the patient complained of pain in the right shoulder and of a catching pain in the right hypochondriac region at the junction of the sixth and seventh costal cartilages with the sternum; (5) that the most careful examination failed to detect any evidence of disease in the lungs, heart, or any other organ capable of accounting for the symptoms; and (6) that there was nothing either in the personal condition of the patient, his previous state of health, or the family history suggestive of tubercle, acute tuberculosis being one of the conditions which was naturally thought of as a possible cause of the symptoms. For the reasons given above I concluded:—Firstly, that the febrile disturbance was not due to malaria, to tubercle, or to ulcerative endocarditis; further, there was no suspicion of typhoid fever. Secondly, that it was apparently due to some internal suppuration; and thirdly, since there was no discoverable local lesion in any other organ (negative evidence), and because (*a*) of the very definite history of dysentery, and (*b*) of the presence of pain in the right shoulder and right hypochondrium (positive evidence), that, notwithstanding the absence of any positive enlargement of the liver, the internal suppuration, which we believed to be present and to be the cause of the fever, was in all probability situated in the liver. Believing, then, that the case was one of hepatic abscess we decided that if the symptoms did not subside after further

[2] Vratch, No. 47, 1892.
[3] Archiv für Kinderth, 1894, p. 222.

treatment with still larger doses of quinine the liver should be explored by diagnostic puncture with the object of endeavouring to localise the pus. On Oct. 23rd, as no improvement had resulted, Mr. Stiles was asked to see the case. He agreed with the diagnosis but considered it advisable to wait for further indications of the position of the supposed abscess before proceeding to operative interference. On Oct. 30th another consultation was held, Dr. Whyte, Dr. Dewar, Dr. Bramwell, and Mr. Stiles being present. The patient was evidently losing ground; his expression was indicative of languor and debility; his features were somewhat pinched and shrunken; he was thinner; the fever was higher, and although there was no jaundice he exhibited in some degree the sallow, earthy, complexion which is frequently observed in patients suffering from hepatic abscess. He complained of a dull, ill-defined pain and sense of weight over the right hypochondrium; of attacks of chilliness, amounting almost to rigors; and of profuse perspirations, especially during sleep. He preferred a dorsal decubitus, but it could not be said that lying upon his left side gave rise to any additional discomfort. The temperature chart during the previous fortnight showed a distinctly hectic type of fever, the evening rise ranging from 102° to 103°, with a morning fall to between 99° and 100°. The tongue was moist, with a white fur on the dorsum and red edges. The appetite was markedly impaired, but there had never been any vomiting. The bowels were normal. The urine was highly coloured and loaded with urates, but otherwise normal. The abdomen was flat and flaccid. The epigastrium was, if anything, a little hollowed out; its two halves were perfectly symmetrical and moved equally with respiration. The muscles attached to the right costal margin were free from any rigidity. Two of the gentlemen who took part in the consultation thought that there was just a suspicion of greater fulness on the right side opposite the seventh, eighth, and ninth ribs in the mid-axillary line, but the alteration, if any, was so very slight (and two of us were not satisfied that it actually did exist) that little or no significance could be attached to it. The intercostal spaces over the region of the liver were quite distinct and there was no trace of subcutaneous œdema. The patient was unable to refer to any distinct local pain further than a sense of weight and aching over the whole of the right hypochondrium and of a catching pain on taking a deep breath at the junction of the sixth and seventh right costal cartilages with the sternum. There was no local tenderness; indeed, the ribs and interspaces could be very firmly pressed upon without causing any discomfort. There was certainly no enlargement of the liver in a downward direction, and percussion failed to show any evidence of a dome-shaped enlargement upwards. There was no cough. The lungs appeared to be quite healthy. At the extreme base of the right lung in the posterior axillary line a very faint friction rub (probably sub-diaphragmatic) was heard over a very localised area about the size of a five-shilling piece. There was no enlargement of the spleen. The heart was quite normal. Rectal examination was entirely negative. The general condition was less satisfactory than it was when I had last seen the patient a fortnight previously. I saw no reason to modify my previous conclusion that the cause of the febrile disturbance was in all probability suppurative hepatitis, and that the pus was probably deeply seated in the upper and back part of the right lobe. The very localised friction rub over the base of the right lung, which was the only physical sign indicative of disease, seemed to support this opinion, which was concurred in by all the gentlemen who were present at the consultation, and was communicated to the patient's relatives. The question of immediate exploratory puncture was again debated, and it was decided to wait for a few days longer with the object of seeing if any further symptoms or signs indicative of the position of the supposed abscess would develop; and then, whether such development took place or not, that the operation of exploratory puncture should be performed.

THE SURGICAL TREATMENT OF THE CASE AND REMARKS BY MR. STILES.

On Nov. 7th I was sent for to see the patient again. He had had a bad night in consequence of having been seized with a lancinating pain localised to the seventh interspace in the mid-axillary line. The evening temperature during the previous week had risen to between 103° and 104° F., and on one occasion reached 104·6°; there had been no distinct rigors, but the night sweats were more profuse. As the temperature had gradually been getting higher and the patient slowly but surely losing ground it was decided to explore the liver for pus, notwithstanding the absence of any enlargement. A medium-sized trocar and cannula belonging to the ordinary Potain's aspirator was pushed into the liver in the mid-axillary line through the seventh intercostal space; this situation was selected, firstly, because from it the upper and back part of the right lobe could be most readily reached, and, secondly, because it was the seat of the sharp localised pain of which the patient complained. Pus was reached after the trocar had penetrated for a distance of about two and a half inches from the surface, a slight resistance being encountered as the wall of the abscess was pierced. About a tablespoonful of brick-red pus, strongly suggestive of anchovy sauce, was removed and received into a sterilised bottle. It was found that the cannula could be pushed up to the hilt without meeting with any resistance, thus proving that the abscess was of considerable size. The pus, which was without odour, was carefully examined microscopically for organisms, but none could be discovered. Gelatin and agar-agar tubes were inoculated and remained sterile. In view of the fact that amœbæ have been found in such abscesses by Lösch, Kartulis, Koch, Osler, Councilman and Lafleur, Galloway, and others, many films were specially stained for them, but with a negative result. The "pus" consisted chiefly of granular detritus, fragments of chromatin, pigment granules, and a few red and white blood-corpuscles.

On Nov. 9th, assisted by Mr. Ernest Fortune, I performed the following operation. The skin having been pulled downwards, an incision four inches in length, and commencing in the mid-axillary line, was carried obliquely downwards and forwards over the eighth rib and a portion of the latter, two and a quarter inches in length, was excised subperiosteally. The upper edge of the wound was then retracted and a corresponding portion of the seventh rib was excised, also subperiosteally. With an aneurysm needle a cat-gut ligature was tied round the extremities of each of the periosteal troughs which remained, thus securing the intercostal vessels. The periosteum which intervened between the ligatures was then removed, as were also the adjacent intercostal muscles and a digitation of the serratus magnus. In this way an area of costal pleura about two inches square was exposed, an endeavour having been made not to wound the pleura in dissecting the above mentioned structures from off it. It was found, however, that a small opening had been made into the pleura in dividing one of the ribs, the result being that a small quantity of air could be heard to enter the chest with each inspiration. The general cavity of the pleura was next shut off by the introduction of a circle of interrupted and overlapping catgut sutures, according to the method recommended by Mr. Godlee,[1] but deeply enough to penetrate, not only the costal and diaphragmatic pleura, but the whole thickness of the diaphragm along with the capsule of the liver. A crucial incision was then made through the costal pleura within the area enclosed by the sutures, and the diaphragm, covered by its pleura, was exposed. The diaphragm was then incised parallel to its fibres and—as was anticipated from the slightly thickened and opaque condition of its pleura—was found to be adherent to the liver. As, however, the adhesions were recent and allowed the fibres of the diaphragm to be readily separated from the capsule of the liver these two structures, along with the four doors of the costal pleura, were united by a second continuous circular suture placed within the interrupted ones already mentioned. An area of liver about the size of a half-crown piece was thus exposed within the second or inner circular suture. The circumference of the wound was then packed with a strip of gauze, and the largest trocar and cannula of the aspirator was pushed backwards and slightly upwards into the liver and the abscess reached at a distance of about one inch from its surface. With the cannula retained in position to act as a guide a knife was pushed alongside it into the abscess, and the opening dilated by a pair of dressing forceps so as to freely admit the finger. There was no hæmorrhage to speak of. Before allowing the contents to escape the finger was used to ascertain the size and nature of the abscess cavity. It was found that we had to deal with one large cavity, nearly the size of a child's head, situated in the upper and back part of the right lobe, the commonest situation. The finger was unable to reach the limits of the abscess until the greater part of the contents had been allowed to escape.

[1] Brit. Med. Jour., Oct. 22nd, 1887.

The wall of the abscess was soft and friable. There were no diverticula. The pus, which had the appearance already described, was of a mucoid consistency and contained much débris and soft pulpy necrotic masses. After evacuating the contents the cavity was flushed out with a large quantity of sterilised water, which brought away a further quantity of necrotic tissue. The cavity was drained by means of a Keith's glass tube, three inches long, and fitting tightly within a flanged rubber tube long enough to project for an inch or so beyond the glass. In this way collapse of the tube was prevented, while at the same time the risk of its extremity pressing injuriously upon the wall of the abscess was avoided. The wound was stuffed with iodoform gauze and partly closed by a couple of sutures introduced at each

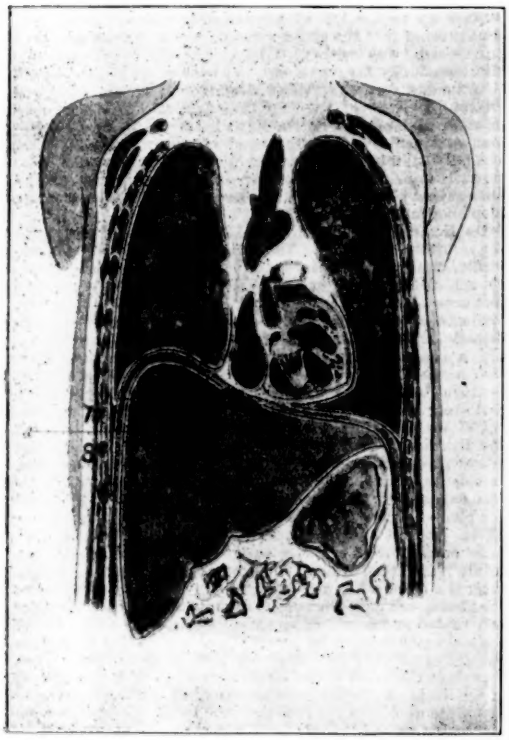


Diagram (constructed from Plate XIII. of Professor Symington's "Topographical Anatomy of the Child") showing (a) the position of the abscess and its relation to the parts concerned in the operation—viz., the lower border of the lung, the pleural cavity, the diaphragm, and the peritoneal cavity. The figures 7 and 8 indicate the seventh and eighth rib respectively.

extremity. On Nov. 10th the patient had slept well; the temperature was normal, the pulse 66, and the respiration 23; the sweating was much less. He complained of pain when he tried to move the arm. On the 11th he looked much brighter, having already lost to a great extent the earthy and pinched appearance. The pulse and temperature were normal and he was more inclined for food. The dressing was soaked with a considerable quantity of dark red muco-pus which was almost gelatinous in consistence. On the 13th he had been perspiring more freely; the temperature was 101°, the pulse 80, and the respiration 28. The wound was dressed, the tube being found to be blocked with gelatinous-looking necrotic masses. There was retention of two or three ounces of muco-pus, which accounted, no doubt, for the elevation of the temperature. The iodoform gauze stuffing was removed and renewed. A probe was passed for five inches before striking the further side of the abscess. On the 15th the temperature had been normal since the last dressing. The discharge was copious and continued to be of the same character. The appetite was much improved and he could move the arm more freely. On the 17th the discharge was of the same character, but less in quantity. On the 21st he complained of pain in the right side, which had been present since the previous night. This was found to be due to the pressure of the flanged edge of the glass tube which then passed very obliquely upwards and backwards. Œsophageal tubing was substituted for the glass tube. On the 24th no pain had occurred since the tube had been changed. The discharge was then very scanty and had quite altered its character, being ordinary or laudable pus, such as one would expect to come from an abscess cavity lined by healthy granulation tissue. The unhealthy necrotic lining had evidently been completely cast off. The probe passed very obliquely upwards for about three inches; from its direction it was evident that contraction was taking place mainly from below, in consequence, no doubt, of the upward pressure exerted by the abdominal contents. A smaller and shorter tube was introduced, and on the 29th this was removed and the sinus, only one and a half inches in length, stuffed with iodoform worsted. The further progress need not be detailed; suffice it to say that the patient rapidly gained in weight and strength, so that by the end of the fourth week he was able to be out of bed, and three weeks later he was going about out of doors with the wound completely healed. On Jan. 2nd, 1896, physical examination showed that the liver was very considerably diminished in volume; the relative dulness in the mammary line commenced at the upper border of the fifth rib, and became absolute at the sixth interspace; the lower edge did not quite reach the costal margin, and light percussion gave a stomach note over the entire costal angle right up to the sternum. On the right side, below the angle of the scapula, and in the lower axilla, the lung note was somewhat impaired and ceased altogether two fingers' breadth above that on the left side. The breath sounds over this area were feeble, otherwise they were normal. There was no friction. There was some falling in of the chest wall on the right side opposite the seventh, eighth, and ninth ribs, but the expansion of the chest was equally good on the two sides. The patient was seen again a few weeks ago and appeared to be in perfect health; he had gained two stones in weight since the operation, and was in the habit of taking a great deal of exercise; his digestion left nothing to be complained of. The cicatrix was somewhat depressed and became drawn in during inspiration. The physical signs were much the same as they were five months ago. The whole of the costal angle was still free from liver dulness, but the breath sounds at the base of the right lung were more distinct and could be heard almost down to the same level as on the left side.

Remarks by Mr. STILES. — In reviewing this case from the surgical aspect there are one or two points to which further allusion may be made. Although the history, the discomfort in the hepatic region, the constitutional symptoms, and the healthy condition of the other organs all pointed to suppurative hepatitis, it nevertheless remained for the aspirator to establish the diagnosis, to determine the situation and size of the abscess, and to decide as to the nature of the operation which would be required to be performed. If pus be present in the liver without giving rise to any external manifestations, then we must conclude that we have to deal either with small multiple abscesses or with a single abscess which, if of considerable size, will in all probability be situated either in the upper or the upper and back part of the right lobe. The question therefore arises as to the best site from which to make an exploratory puncture in order to reach the pus by the safest and most direct route. As the result of investigations in the post-mortem room I came to the conclusion that the seventh intercostal space in the mid or anterior axillary line should be the point first chosen, and the trocar passed either vertically to the surface, or with more or less inclination upwards and backwards. The lower part of the pleural cavity, if not obliterated by adhesions, will of course be traversed, but the lower edge of the lung will be above the puncture. Should this fail to strike the pus, further exploration should be made through the seventh space in the scapular line, and, if necessary, from the sixth and eighth spaces. If there be no downward enlargement of the liver, the ninth space would be too low, and there would be considerable danger of the trocar entering the colon, the gall-bladder, or even the duodenum. The next question to consider is, having struck the pus, should the operation be at once proceeded with? I think not. A small quantity of

pus should be withdrawn into a sterilised bottle and subjected to careful microscopic examination, and culture tubes should be inoculated. By this means the surgeon, within forty-eight hours, will gain information as to whether the abscess be sterile or whether organisms be present, and if the latter, their nature. In a large proportion of cases the pus in tropical abscesses of the liver has been found to be sterile. In other cases it has contained the amœba coli, either alone or in conjunction with the ordinary pus-forming organisms, or the latter only have been found. Should pyogenic organisms be discovered, then the subsequent operation must be performed in such a way as to prevent infection of the pleural and peritoneal cavities. This, of course, is best done by operating in two stages. The first operation consists in the exposure of the liver, the shutting off of the serous cavities by sutures, and the plugging of the wound to bring about adhesions; at the second, a few days later, the abscess is opened. If, however, the pus be sterile, as it very frequently is, then I see no reason why the abscess should not be opened at once, and the patient thereby relieved from the anxiety and shock of a second operation. Even although the pus be sterile, that should not prevent the operator from shutting off the pleural and peritoneal cavities as far as possible. To do this, portions of two ribs should be excised and a good large area of costal pleura exposed. Having excised the ribs, the soft parts (periosteum, intercostal muscles, and a digitation of the serratus magnus) should be dissected off the costal pleura, if possible, without wounding it, a step which will require considerable care when dealing with thin healthy pleura. From the reports of cases to which I have had access I find that the costal pleura has been incised before stitching it to the diaphragm. It appears to me that it is a much better plan to pass the sutures before incising the pleura; with the costal pleura freely exposed and stretched across the floor of the wound the suturing of its circumference to the diaphragm and liver is rendered simpler and more satisfactory than would be the case if the pleural cavity were first opened into. When the right lobe of the liver is the seat of an abscess, the diaphragm is pushed up into close contact with the costal pleura, so that with a fully curved needle (a Hagedorn's and holder) a circle of interrupted and overlapping sutures may readily be introduced. Most surgeons, I observe, have introduced them merely into the diaphragm; but seeing that we can never be certain whether the liver has become adherent to the diaphragm it is better to carry the sutures through the diaphragm into the capsule of the liver and in this way to shut off the pleural and peritoneal cavities at one and the same time. Another advantage of not incising the pleura until after the sutures have been introduced is that very little air enters the chest and complete and sudden collapse of the lung is thus prevented—a matter of some importance with the patient under the influence of an anæsthetic. In our own case air was sucked into the chest through a small accidental opening into the pleura as well as each time the pleura was punctured in the act of introducing the sutures. Dr. Whyte, who administered the anæsthetic, was unable to observe that this produced any effect upon the respiration. The same observation has been made when the pleura has been wounded in the act of removing a cervical rib. The inner continuous circular suture may, perhaps, not have been necessary; as, however, the adhesions between the diaphragm and liver were of recent origin, it was thought safer to employ it; in the absence of such adhesions it should certainly be used. Some surgeons take special precautions in order to diminish the amount of hæmorrhage resulting from the necessary incision into the liver to reach the abscess. Zancarol,[2] who has probably had the largest experience in the treatment of hepatic abscess, recommends that the cautery be used for this purpose. Edmunds,[3] having introduced a special trocar and cannula into the abscess, withdraws the former and substitutes for it a narrow, grooved director; the cannula is then withdrawn and a long, wedge-shaped knife passed along the director into the abscess. Except in abscesses which are unusually deep-seated, the simple method of pushing the knife into it alongside an ordinary cannula left in position to act as guide and following up this with dressing forceps to dilate the opening sufficiently to introduce the finger, appears to be a perfectly safe procedure.

As regards the treatment of the abscess cavity, Fontan[4] recommends that its wall be scraped and claims that by this means the healing process is hastened. In a large abscess of the liver, such as has been described, thorough douching followed by free drainage is simpler and gives perfectly satisfactory results and, moreover, is free from the risk of hæmorrhage or of opening into the biliary passages. The last point to which it is necessary to refer is one which has already been mentioned—namely, that cicatrisation of the abscess takes place chiefly from below. This is a point which should be borne in mind in considering the level at which the abscess should be opened, as it is evident that drainage will be better maintained if the abscess be opened at its upper, rather than at its lower part.

Edinburgh.

[2] Traitement Chirurgical des Abcès du Foie des Pays Chauds. Paris: Steinheil, 1893.
[3] St. Thomas's Hospital Reports, vol. xxi., 1893, p. 205.
[4] Revue de Chirurgie, Février, 1892.

A CONTRIBUTION TO THE OPERATIVE TREATMENT OF MALIGNANT DISEASE OF THE RECTUM, ILLUSTRATED BY EIGHT CASES.[1]

BY H. LITTLEWOOD, F.R.C.S. ENG.,
SURGEON TO THE GENERAL INFIRMARY, LEEDS.

I NEED scarcely make any apology for bringing forward such an important subject, for during recent years a great many advances have been made in the treatment of rectal cancer and the number of cases coming for treatment to the Leeds Infirmary has greatly increased. In the last ten years there have been 166 cases under treatment. In 1886 there were only 7 cases; since then there has been a yearly increase, and in 1894 there were 23 cases and last year the same number. During the past eighteen months I have had 13 cases under my care; 8 of these have had proctectomy performed and form the basis of my remarks.

In Mr. Watson Cheyne's recent lectures on operations for cancer he is not nearly so enthusiastic for the local removal of the disease when situated in the rectum as he is for its removal in other regions. If only colotomy is performed, however comfortable a certain number of patients may be after the operation, it can scarcely be considered satisfactory, for the disease still remains. The increasing diminution of the mortality after proctectomy and the fact that the form of cancer commonly affecting the rectum is not one of the most malignant forms makes it all the more important to attempt a complete removal of the disease.

The operation of proctectomy in either the lateral or lithotomy positions I must confess has never had any great attractions for me. My real interest was first aroused by Mr. Godlee, who kindly saw the first case I refer to in this paper with Mr. Pogson and myself in October, 1894; he then gave me an account of the position in which he operates in these cases. One operation in the post-mortem room soon convinced me of the great value of his advice. I quote from Mr. Godlee's letter to the *British Medical Journal*, July 8th, 1893, describing the position. "Instead of placing the patient in the lithotomy position I turned him on his face close to the side of the table; the right thigh was extended, but the left hip was flexed, the thigh hanging over the side of the table, and the knee resting on a chair." I have modified this by placing the patient in the position used for dissecting the buttocks, raising the pelvis on a triangular block, and having both knees flexed and resting on a chair (see Fig. 1).

It appears to me that by having both hips flexed the parts become still more accessible, and it is astonishing with what comparative ease the anæsthetic can be administered. After the sacral route advocated by Kraske, the position recommended by Godlee appears to me to be the most important detail contributed to the performance of proctectomy. Many operators have introduced some modification of Kraske's operation; Bardenheuer divides the sacrum at the level of the third sacral foramen; and Mr. W. H. Brown's case, reported in THE LANCET of June 4th, 1892, is familiar to all. Some surgeons perform a preliminary colotomy in all cases unless there is considerable obstruction. I think this is unnecessary and should be the exception. A week's careful emptying of the bowels before the operation by means of

[1] A paper read before the Leeds and West Riding Medico-Chirurgical Society on Friday, April 17th, 1896.

purgatives and enemata, a diet that is easily absorbable, and after the operation to prevent the bowels from being opened for ten or fourteen days will obviate the necessity of this procedure. If the lowest part of the rectum is removed the bowels may be opened as soon as there is a good granulating surface. In none of the eight cases have I performed colotomy. The growth in all cases was a columnar epithelioma. In the following short account of these cases I shall describe more particularly the operative details

FIG. 1.

Position of patient for operation.

carried out in Case 6, as I consider they are of some practical importance as they were arrived at from the experience gained in the first five cases.

CASE 1.—A man aged sixty-five years was seen with Mr. F. W. Pogson on Sept. 1894. He was a tall, thin man, with well-marked arterial degeneration. His symptoms commenced six months previously. On rectal examination about three inches from the anus there was found to be a growth which nearly surrounded the whole lumen of the bowel. It was not fixed. On Oct. 16th the patient was placed under chloroform and an incision was made over the left side of the sacrum from the level of the third vertebra and continued in the middle line to within one inch of the anus. The coccyx was removed, and as there was not sufficient room a small piece of the left side of the sacrum was also taken away. The growth was excised, leaving the lower two inches of the bowel. The anterior parts of the mucous membrane of the divided portions were stitched together and the posterior part of the upper attached to the edge of the wound. The peritoneum was opened and closed with fine silk. The patient made a good recovery, got up on Nov. 4th, and went out of doors on the 29th. After this he got very low-spirited for two or three months and was unnecessarily worried about his affairs. He is now in very good health. There is no recurrence of disease and if the motions are not liquid he has very little trouble with his bowels.

CASE 2.—A man aged forty-two years was sent to me by Mr. La Touche of Ossett. He was admitted to the infirmary on Feb. 20th, 1895. He had had symptoms about twelve months. On rectal examination there was found a mass of new growth situated within half an inch of the anus and surrounding about two-thirds of the lumen of the bowel. The growth extended upwards for about two inches. He was operated upon on Feb. 26th. Ether being administered, an incision was made in the middle line from the lower part of the sacrum to the anus. The rectum was readily exposed and the region of the growth separated to some extent from the surrounding tissues. The bowel was then opened and the growth excised with the lower part of the rectum. A small strip of mucous membrane on the right side was not removed as it was not involved with the disease. The cut edge of the bowel was drawn down and fixed to the structures about the anus by some deep silk sutures, the posterior wound being closed by silkworm gut and drained. By allowing for drainage in this position some of the objections against fixing the cut edge of the mucous membrane to the anus are met. About two and a half inches of the bowel were removed. The patient made a good recovery, leaving the infirmary on March 30th. About two months after the operation he returned to his work. He had a fair control over the bowels if the motions were not fluid. He was quite well till the beginning of this year, since then he says he has not felt so well. He was examined on Feb. 28th, 1896, by Mr. La Touche, who reported that there was no local return, but he thought that there was some enlargement of the liver, which he suspected might be due to secondary growth.

CASE 3.—A man aged fifty-four years, a coachman, was sent to me by Dr. Kilner Clarke of Huddersfield. He was admitted to the infirmary on March 22nd, 1895. He was a healthy-looking man and had had symptoms for about six months. On rectal examination the position of the disease and its extent was found to be about the same as in Case 2, with the exception that a strip of mucous membrane on the left side was not involved. On March 25th, 1895, a similar operation was performed under chloroform as in Case 2. About two and a half inches of gut were removed. The patient got up on April 18th and left the infirmary on the 22nd, having made a good recovery. Dr. Kilner Clarke writes on March 3rd, 1896: "I saw —— on March 1st. He looks well and is doing his work, being on the box of his carriage two or three hours every day. He is troubled with diarrhœa in the mornings and for this takes regularly one or two grains of opium. He has no control with fluid motions. There is no local return."

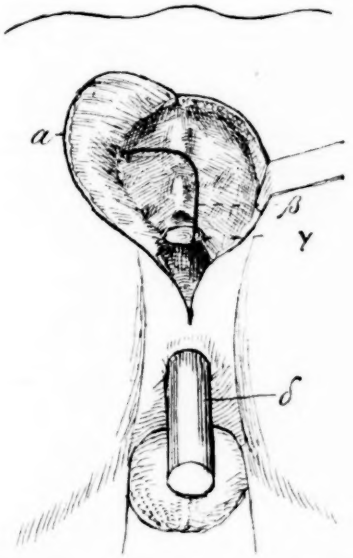
CASE 4.—A man aged sixty-five years was sent to me by Mr. J. C. Clarke of Morley. He was admitted to the infirmary on June 26th, 1895. He was a healthy-looking, but very nervous, man and had had symptoms for six months. On rectal examination, just without the margin of the anus on the right side there was found a hard growth about the size of a threepenny-piece, which was slightly ulcerated on the surface. Extending from this up into the bowel for about two inches was an indurated mass which surrounded about two-thirds of the lumen of the bowel. On July 1st, 1895, under chloroform, a similar operation was performed as in Cases 2 and 3. About two inches of the lower part of the rectum was removed. The wound healed well. He did not sleep much the first five days after operation, and on July 6th became maniacal and remained in this condition until the 13th. After this he slowly recovered and left the infirmary on Aug. 12th. On Feb. 21st, 1896, the patient was very comfortable and had gained weight, no local recurrence had occurred, there was some narrowing of the anus, but the patient had good control unless he had diarrhœa.

CASE 5.—A man aged fifty-five years was admitted to the infirmary under the care of Mr. Mayo Robson on Aug. 19th, 1895. During Mr. Robson's absence I took charge of the case. He was a tall pale man, had lost weight, and had had symptoms for six months. On rectal examination a mass was discovered which almost surrounded the bowel, the lower limit of this being about three inches from the anus. It was apparently fixed on the left side, the finger could be passed into, but not beyond it. Under ether, on Aug. 23rd, a similar incision was made as in Case 1. The coccyx was removed and the soft structures attached to the left side of the sacrum were divided to the level of the third vertebra. The rectum was exposed and divided below the growth. It was now found that free access to the growth could not be obtained, so the lower part of the left side of sacrum was removed from about the level of the third sacral vertebra. The growth was then removed, leaving about two and a half inches of the lower portion of the rectum. The divided ends were brought together by means of a Murphy's button. This, unfortunately, could not be made to close accurately, so some additional stitches were put in. The peritoneum was opened and closed with fine silk; four

and a half inches of bowel were removed, the growth practically surrounding the whole lumen of the bowel. Fæcal extravasation occurred on the fifth day through the posterior line of sutures, and the button was removed the next day. The patient made a good recovery, with the exception that from Aug. 29th to Sept. 5th he was delirious at night and got out of bed two or three times. After this he made a good recovery, but passing all his motions through the posterior opening. He left the infirmary on Oct. 28th. The patient was re-admitted on Feb. 25th, 1896. He was now in good health, had put on a stone in weight, and the bowels opened once or twice in the morning. There was a prolapse in the bowel, sometimes two or three inches in length; this was easily pushed back and kept in position by a pad. The upper and lower parts of the anterior half of the mucous membrane had united. Thinking I could improve his condition by uniting the posterior parts of the bowel I did this on Feb. 28th under ether. Everything looked well until March 4th. It was then found that some of the stitches had given way. He left the infirmary a fortnight after the operation, the opening having diminished in size. I may make a further attempt to close the opening.

CASE 6.—A woman aged thirty-seven years was admitted to the infirmary under the care of Mr. Mayo Robson, who very kindly transferred the patient to me. She was a healthy-looking woman who had suffered from constipation for years; her symptoms commenced nine months ago. On rectal examination just within reach of the finger a hard irregular collar could be felt projecting into, and narrowing the lumen of, the gut. The opening admitted the tip of the finger, but the upper limit could not be ascertained. It appeared fixed behind and to the left, but under an anæsthetic this part could be moved. An operation was performed on Jan. 6th, 1896. The patient was under the influence of chloroform and ether and was in the prone position. An incision of a sickle shape was made, beginning at the level of the left posterior inferior iliac spine, crossing over the middle line of the sacrum and curving with the convexity to the right to the right superior cornua of the coccyx, and then in the middle line to within one inch of the anus (Fig. 1, α). A skin and muscle flap was turned outwards to the left (Fig. 2, α) and the lower part of the incision

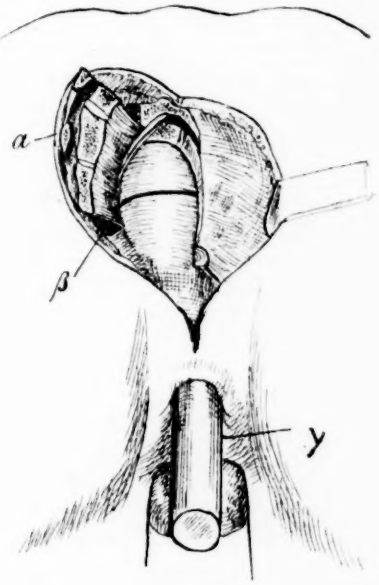
FIG. 2.



α, The skin and muscle flap turned back. β, Line of saw cut through the sacrum. γ, End of bougie (δ) in rectum in contact with growth.

deepened to the coccyx and rectum. The coccyx was then removed and with a narrow saw the sacrum was divided by a cut in a curved direction extending from the left side of the third sacral vertebra across the middle line, and terminating on the right side of the middle line at its lower border, having its convexity to the right. (Fig. 2, β.) The piece of bone so detached was pulled over to the left (Fig. 3, α) and

FIG. 3.



α and β, Flap of sacrum pulled over. γ, Bougie in rectum.

a good view of the posterior surface of the rectum was obtained. A large bougie was now passed into the rectum so that the end was in contact with the disease. (Fig. 3, γ.) This enabled me to easily separate the rectum from the surrounding structures. The rectum was then opened by making a transverse incision below the growth using the bougie as a guide to cut upon, the bougie was removed and the remainder of the bowel divided. The bowel involved in the growth was now well separated from the surrounding structures and divided in the longitudinal direction so as to show the upper limits of the disease and the growth was removed by dividing the gut transversely with scissors about half an inch above the disease. Four inches of bowel were removed. The peritoneum was freely opened and a sponge packed in. All bleeding points could be seen and so were easily ligatured. The two divided ends of the bowel were brought together over one of Robson's bobbins and sutured by a continuous suture of silk. The peritoneum was closed by fine silk and the divided portions of the sacrum were brought together by some silkworm gut sutures through the periosteum and the soft structures attached to it. The wound was closed by silkworm gut sutures and drained by means of a packing of cyanide gauze dusted with iodoform. The bowels were kept closed with opium for fourteen days and were then well opened with some mistura sennæ composita. On examination the sutured ends of the bowel were found to have firmly united together. From this time the bowels were opened every other day. The patient got out of bed on Jan. 29th, and on Feb. 12th she walked about the ward. The parts are now quite healed and the patient is very comfortable. She was shown at the March meeting of the Leeds and West Riding Medico-Chirurgical Society.

CASE 7.—A woman aged fifty-four years was admitted to the infirmary on March 2nd, 1896, under the care of Mr. Mayo Robson, who kindly transferred the patient to me. She was a small, thin woman, and she had had some symptoms for two years and had been getting worse during the last six months. On rectal examination just within reach of the finger an annular growth in the bowel could be felt; it appeared to be movable; the finger could not be passed

beyond the disease; it was ulcerated on the surface. On March 11th an operation was performed similar to that in Case 6. About two and a half inches of bowel were removed. The peritoneum was opened. On March 16th the bowels were unfortunately opened and some fæces extravasated into the wound; it was found that the stitching in the posterior part of the bowel had given way, leaving an aperture about three-quarters of an inch in diameter in this position. The wound on April 17th was granulating up and the opening was getting gradually smaller and was about the size of the tip of the finger. I think it will ultimately close. A week after the operation there was some mental disturbance which lasted about ten days; she was very depressed, did not recognise her friends, talked incoherently, and at times tried to get out of bed. She afterwards became quite cheerful.

CASE 8.—A man aged forty-eight years was admitted into the Infirmary on March 24th, 1896, under my care. He had had symptoms for twelve months. At first he lost weight, but during the past six months he said he had gained weight. He was a healthy-looking man. On rectal examination a growth was found situated about three inches from the anus and surrounding the anterior two-thirds of the bowel; the finger would not reach the upper limit of it. It was ulcerated on the surface. On March 27th, 1896, a similar operation was performed under ether to that in Cases 6 and 7. About three inches of bowel were removed, the peritoneum was opened, and the peritoneal surface of the gut in the region of the growth was found to be infiltrated. The day after the operation there was some mental disturbance, which lasted about three days. When asked a question instead of answering it the patient would repeat the question over and over again, and he tried at times to get out of bed. The bowels were opened on April 5th, and it was then found that the posterior part of the gut had given way and that fæces had extravasated into the wound. The wound was now granulating up, part of the motions coming by the natural way and part by the wound. It was then too early to say if the fistula would close up, the fact that some of the motion passed the natural way and that the granulations in the wound were vigorous were points in favour of such a result. The following note was made on May 25th, 1896: "Both patients (Cases 7 and 8) are getting out every day. The wounds are healing. All solid motions are passing the natural way. They have both small fistulous openings which appear as if they would now rapidly close."

My best thanks are due to Mr. Walter Thompson, our late resident surgical officer, for his help at all the operations: to Mr. A. S. Robinson and Mr. R. H. Trotter for the careful manner in which they have carried out the after-treatment and so greatly contributed to the success of the operation. It is needless to say that the operation is one of great severity, the time taken in its performance ranging between one and one and three quarter hours. I venture to think that the foregoing records speak for themselves as to its value, and I believe the following points suggested by them are worthy of consideration: 1. The preparation of the patient by having the bowels thoroughly cleaned out before the operation, and then keeping them closed for twelve or fourteen days after if the divided ends have been united. 2. A preliminary colotomy should be the exception. 3. The advantages of the prone position enabling one to easily see all the steps of the operation. 4. The skin and muscle flap. 5. The bone flap which can be sutured after the resection of the gut. It is important if possible to gauge how much of the sacrum it may be necessary to saw through. As the spinal dura mater extends to the level of the second sacral vertebra it would not be wise to saw through the bone at a higher level. If it is thought that the disease would not be accessible after dividing the bone at this level, the operation should not be attempted, removal by abdominal section would be the method to adopt. 6. The use of the large bougie or large size Hegar's dilator appears to me to be of great assistance: in the first place while separating the bowel from its surroundings, and then as a guide on which to divide the gut transversely. A clean, transverse cut instead of slitting up the bowel in the longitudinal direction is an obvious advantage, especially if one is intending to suture the divided ends. 7. An attempt should be made to restore the continuity of the bowel, and although in the four cases in which I have endeavoured to do this I have only actually succeeded in Case 6, yet there is very little doubt that the ultimate results of Cases 7 and 8 will be equally satisfactory, and even if one does not succeed the patients are no worse off than with a colotomy opening. In Case 5 I could not get Murphy's button to work. In future I should prefer to use one of Mayo Robson's bobbins. 8. When the disease is high up the catheter in the bladder is of very little value; in fact, I only used it in Case 1. 9. One other point in the history of these cases is notable—i.e., five of them suffered within a short time of the operation from some form of mental disturbance from which they have happily all made a complete recovery. All these patients have had great mental anxiety before the operation. The subject of mania following surgical operations, which I have incidentally mentioned, is one of great importance, but scarcely within the scope of this paper.

Mr. Erichsen's "Surgery" (1895 edition) the paragraph describing Kraske's operation ends thus: "Complete suture of the upper end to the lower has seldom succeeded." I have not seen many reports of successful cases, but look with every confidence to the future that these numbers will be greatly increased, and that the artificial anus in whatever position it may be situated—and I think the nearer it is to the original anus the better—will be the exception and not the rule. Early diagnosis will be a general factor in bringing about such a result.

Leeds.

TWO CASES OF EXOMPHALOS.

BY P. A. BRADSHAW-ISHERWOOD, M.R.C.S. ENG., L.R.C.P. LOND.

I FIND that most of the text-books have very little to say regarding this malformation, and having had two cases (or rather one should properly be termed "hepatomphalos") within the last few months I have thought their description might prove to be of interest.

CASE 1.—I was called on Feb. 20th, 1896, to see a woman who had just given birth to her sixth child. She had been attended by a midwife, who noticed a deformity in the child and advised my attendance. The mother was a healthy woman and had never noticed any deformity in her other children, and she had had no miscarriages. The father was a healthy labourer in the employ of the father of the child in Case 2. On my arrival I found a full-grown male child, with a deficiency of the abdominal wall, quite the size of a five-shilling piece, and a coil of intestine protruding therefrom, covered only by peritoneum and amnion, the umbilical cord being attached below the centre and its vessels spreading over the peritoneum in an arborescent manner. The protrusion was resonant all over, and being made up of intestine it was easily reducible. I directed that oiled lint should be applied to the raw surface, and the hernia kept in with a well-adjusted binder. For the first few days the child vomited everything he took, and seemed to be in great pain at times. The cord separated on the sixth day and at the same time the amniotic covering withered, leaving a foul, unhealthy wound, discharging offensive pus. A powder containing Chinosol was now applied night and morning, and in the course of a few days little bunches of granulations began to appear; these coalesced, and I made the following note on April 14th:—"The abdomen around the umbilicus is very protuberant, normal skin having grown over the deficiency and nearly closed the opening; there is still, however, a small part uncovered in the centre having a circumference equal to that of a threepenny piece. The mother states that the child takes well now, but at times becomes very cyanosed. On examination, however, I could not ascertain any cardiac malformation."

CASE 2.—On Dec. 28th, 1895, I was asked to see a child born two days previously with some abnormality of its navel. The father and mother were both healthy, and this was the eleventh addition to their family, all the other children being born without any deformity. I was shown a female child, fairly nourished, and of the usual size and weight. The child was very cyanosed and breathing somewhat after the manner of Cheyne-Stokes's respiration. There was a large circular deficiency in the umbilical region fully four inches in diameter, and bulging through this opening was a hard dark mass evidently the liver, covered only by peritoneum and amnion; it was quite irreducible. The cord was inserted

into the lower part. I refused operative interference, owing to the child's condition, and directed oiled lint to be applied. The child vomited after everything it took, and finally died four days after birth. It was found post mortem that the peritoneum had become glued to the liver, and there was evidence of recent inflammation in the surrounding structures, but no other viscus, however, presented through the opening. The heart was the only other organ which called for attention. There was marked beading of the mitral tricuspid and pulmonary valves due to recent endocarditis attacking both sides of the heart.

Remarks.—As is well known the abdominal wall in front is formed of the epiblast and somatopleure layer of the mesoblast gradually closing the contents in, the last part to close being the umbilical region, which as late as the third month of fœtal existence normally allows a protrusion of intestine. Should development at this stage become arrested the condition described in the cases occurs. I am unable to say what relation the endocarditis of the second case may bear to the condition, or the cyanosis in the first. Galabin states in his "Midwifery," page 332, "the condition 'exomphalos' is often combined with other malformations." Treatment may be divided into operative and palliative. Ashby and Wright, in their "Diseases of Children," mention two cases which were operated on, in which the sloughing part was dissected away and the opening closed by sutures, but both were fatal; but if the protrusion is reducible, I think nothing answers so well as keeping the hernia reduced, and the wound free from friction by means of oiled lint, and as the cord separates and the amniotic covering withers, to dry the part up with a good disinfecting powder. I was much pleased with Chinosol, it seemed to promote granulation, and it completely deodorised the wound. Chinosol is a new disinfectant, its properties being mainly due to the liberation of oxychinoline in the presence of an alkaline medium, wounds, bloods, &c. For further particulars see THE LANCET report, Feb. 29th, 1896.

Ramsgate.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

ACEPHALOUS INFANTS.

BY R. H. D. MAHON, L.S.A. LOND.

I READ with interest Dr. J. L. Kerr's article in THE LANCET of Aug. 8th under the above heading, as I have had two very similar cases myself. In both cases the acephalous child was one of twins, the normal child being born first and the other following in about five minutes without any difficulty. In the first case the mother was a primipara aged about nineteen or twenty years. On the normal child being born I was unable to diagnose the presentation, but the second child was born almost at once, the base of the skull presenting. The only sign of life was a slight convulsive movement of the body. The skull was not developed beyond the base, the upper part of both orbits were absent, the eyes being covered only by the lids. The lower part of the face was quite normal, as was the child in all other respects. The other child was living and healthy. In the second case the mother was a multipara aged about thirty-five years. She had never had twins before; her other children were healthy and without any deformity. In this case also the first child was healthy and living. In the second one the upper part of the skull was absent to the same extent as in the cases described by Dr. Kerr—namely, above an oblique line passing from just above the orbits above the ears to the occipital protruberance. The body was that of a healthy normal child. There were no signs of life.

In neither of these cases was there any history of injury or fright to the mother. It never occurred to me that these might be cases of intra-uterine amputation, but rather arrested development from some cause, in my cases perhaps the pressure of the other fœtus.

Earl's Court-road, W.

NOTE ON A CASE SHOWING THE INTIMATE RELATIONSHIP BETWEEN THE PROSTATE GLAND AND TESTICLE, AS ALSO THE INFLUENCE OF ONE DISEASE ON THE OTHER FOR GOOD.

BY JOHN R. GIBSON, M.D. GLASG., ETC.

A MAN aged between fifty and sixty years, afflicted with enlarged prostate gland and requiring the use of the catheter before any urine could be drawn off, recently became afflicted with acute orchitis of one testicle, the orchitis being probably caused by the irritation of the catheter, as great difficulty was experienced in passing it. Almost immediately after the onset of the orchitis he could pass urine more or less freely, an act he had not performed for over a year, and the whole bladder symptoms underwent great improvement—an improvement which I am glad to state has continued since the orchitis got better.

Paisley.

A CASE OF MALIGNANT PUSTULE; RECOVERY.

BY WILLIAM C. ELLIS, L.R.C.P., L.R.C.S. EDIN., ETC.

CASES of malignant pustule occur so very rarely in country practice that details of a case which came under my care during the past month will probably be of interest to many of your readers, particularly as they illustrate the very satisfactory results attending radical surgical treatment, even after the appearance of severe constitutional symptoms.

The patient, a farmer's son, came to the surgery one morning with two very characteristic pustules, each having a black eschar surrounded by a well-marked ring of vesicles, upon the fingers of his right hand. These were considerably swollen and the lymphatic glands in the axilla were enlarged and tender. He told me that about a fortnight previously he had been dressing sheep for "maggots," and one becoming restive he had struck at it and wounded his fingers upon its teeth. He, however, took little notice of the injury and continued his employment till finished. The wounds partially healed, but two days previously they had become inflamed and irritable and the blebs and swelling had appeared. Early that morning he had had a rigor. The appearances and history were so suspicious that I determined to have another opinion. Twelve hours later Mr. E. B. Hicks of Easingwold, his son, and myself again examined the lad. The arm as well as the hand was now greatly swollen and the lymphatics running to the axilla were red and tender. Our consultation resulted in an unanimous opinion that we had a case of malignant pustule to deal with, and that the free removal of the wounds and surrounding indurated parts was the only treatment likely to be of service. This was done, and the raw surfaces well swabbed with iodine liniment (1 in 8) and then dressed with boracic dressings. The lad slept well during the night, the hand and arm being much less swollen and the temperature at 99·5° F. on the next morning. On the fourth day after I re-dressed the wounds, which were healthy, while the temperature was normal and the lad was feeling quite well.

That this was a genuine case of malignant pustule I think there can be but little doubt. The farmer stated that his flock were healthy, but there have been cases of anthrax in the neighbourhood, and it is probable that the infection was in the wool of some of the sheep, the patient's fingers becoming inoculated by contact with it subsequent to the injury.

Tollerton, Yorks.

EARLY APPEARANCE OF SCIRRHUS OF THE MAMMA.

BY HENRY E. HAYCOCK, M.R.C.S. ENG., L.R.C.P. EDIN.

THE following case, owing to the age of the patient and consequent difficulty of the diagnosis, appears to be worth recording.

A single woman aged twenty-two years came to me on July 23rd of this year complaining of a lump in her right breast. She was an anæmic, sallow-skinned, fairly well-developed woman. Her previous health had been good and she gave no history of any injury. Her parents, alive and

well, denied the existence of malignant disease in any branch of the family. She stated that the lump had existed for six months, and had of late given her a good deal of pain; fearing its nature she had concealed the fact of its existence. It presented a hard swelling above and on the outer side of the right nipple. The skin was freely movable, but the nipple was deeply retracted. There appeared to be no adhesion to the deeper structures. No enlarged glands could be detected in the axillæ or above the clavicle. The diagnosis of malignant disease was made. The following day on making an incision into the tumour and noting its suspicious appearance, with the assistance of Mr. Warters of Riddings I removed the breast. There was slight adhesion to the fascia of the pectorales; accordingly that portion beneath the tumour was removed. The incision, dressed with dry boracic lint and covered with double cyanide gauze and a bandage, on the fourth day presented no inflammatory signs; the silk sutures were removed and on the ninth day union was sound. Dr. Turner, of the Leicester Bacteriological Laboratory, has kindly supplied me with the following notes: "The naked-eye appearance showed a hard, round mass about the size of a large walnut adherent to the subcutaneous tissue. On cutting into the tumour it gave a whitish-grey appearance, with much fibrous tissue intersecting masses of fat." With regard to the microscopic appearance, "on cutting sections and staining with picro-carmine the pink fibrous stroma forming alveoli and containing masses of irregular epithelioid cells with nuclei could be seen, more numerous near the centre and growing less frequent towards the periphery of the tumour."

Alfreton.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ROYAL FREE HOSPITAL.

CASE OF ACUTE PHTHISIS, WITH RAPID EXTENSION OF PHYSICAL SIGNS, BUT WITHOUT EXPECTORATION FOR FOUR MONTHS, WHEN TUBERCLE BACILLI WERE FOUND.

(Under the care of Dr. SAMUEL WEST.)

THIS case of acute tuberculous disease presents points of interest in the mode of invasion of the pleura and lungs, and is remarkable for the absence of expectoration for so long a time after the disease had caused the man to apply for treatment. It is evident that in doubtful cases too much stress must not be laid on the absence of expectoration as pointing to the more favourable diagnosis.

A man aged thirty-five years had never been strong, but he was in his usual health until the beginning of August, 1895, when he began to feel languid and ill and to lose flesh. A week later he was admitted into the hospital with the signs of a small pleuritic effusion and a temperature oscillating between 100° and 103° F. There was nothing in the previous history or the family history which appeared to bear upon the case. The patient looked ailing and as if suffering from fever, and there was nothing except the condition of the chest to explain this. Over the whole chest there were some signs of general bronchitis—viz., rhonchus, sibilus, and slight crepitation. At the right base there was a small area of dulness, probably due to the presence of fluid. The apices at this time presented no evident signs of disease. After being in the hospital a few days—that is to say, three weeks from the commencement of his illness—the right side was aspirated and thirty-one ounces of brownish, serous fluid were removed. This became almost solid on boiling and coagulated spontaneously on standing. The general condition remained unaltered. The temperature continued the same, rising almost daily to 100° or 103°, falling sometimes to normal or a little below. The general signs of bronchitis subsided, but on the right side crepitation was heard all over the dull area at the base, behind, and for some distance upwards, almost to the apex. On Sept. 7th, that is, exactly a month after the commencement of his illness, definite physical signs were discovered at the right apex; the percussion note was impaired, the vocal vibrations increased, and there were abundant fine crepitations both in front and behind. At this time thrombosis occurred in some of the small veins of the right calf, but this soon subsided and was of no further consequence. The patient coughed a little, but brought up nothing. From this time the physical signs gradually increased, and at the end of September, that is to say, about seven weeks from the commencement of illness, cavernous breathing was heard in the upper part of the right axilla and bronchial breathing over the rest of the axilla, as well as above the right clavicle. There was a little sibilus over the whole side and a great deal of crepitation both in front and behind at the apex. These crepitations were audible right down into the left axilla and nearly to the base behind. At the end of October some few crepitations were heard at the left apex, the condition on the right side remaining much the same as before. The cough was somewhat worse, but still there was no expectoration. On Dec. 7th the condition on the right side was much the same, but there was a great deal more crepitation at the left apex, very sharp in character, especially in the supra-scapular fossa. It was not until Dec. 11th that the patient began to bring up some sputum. This was greenish, thin, not very viscid, somewhat frothy, and when examined presented a large number of tubercle bacilli. Up to this time there had been absolutely no expectoration, and he did not appear to cough anything up even into the mouth and to swallow it. Very careful inquiry was made upon this point both of the patient and the nurses, and if there had been anything to expectorate there is no doubt he would have expectorated it. When the expectoration once commenced it rapidly became abundant and of the ordinary character, and contained a very large number of tubercle bacilli. From this time the case ran the ordinary course, the patient remained in the hospital for another month, but since that time he has not come again under observation. He was in the hospital altogether five and a half months. For the first four months of his illness, although he was constantly watched and the physical signs made rapid progress, first in the right lung and then in the left, still no expectoration was brought up at all. The patient, who at first had lost flesh and strength considerably and presented all the signs of "galloping consumption," towards the end of the time began to improve; but the temperature throughout, even up to the time that he left, was an irregular hectic, averaging somewhere about 100·5°, sometimes reaching 103°, sometimes falling below normal, but being raised every day. In all other respects, save in the absence of expectoration, the case ran the ordinary course and presented all the appearances of one of acute phthisis.

Remarks by Dr. WEST.—The above case is interesting as an example of pleurisy ending in phthisis, or, as it would be better expressed, of a pleurisy occurring as the first evidence of tuberculous disease of the lung. The nature of the case was suspected from the beginning on account of the generalisation of the signs on both sides of the chest and because there was also some crepitation at the opposite base and possibly also a little pleurisy there. Although the fluid effusion was at the base there is no reason to conclude that the tuberculosis first began there; indeed, it is probable that the tubercle started in its usual place at the apex, and gave rise to a pleurisy there, the fluid gravitating as it needs must to the lowest part of the pleura. Sputum containing tubercle bacilli is generally one of the earliest signs of phthisis, and it is certainly very rare in an acute and rapidly advancing phthisis to have no expectoration for so long a time. I remember a similar case in a girl sixteen years of age, who neither coughed nor expectorated for three months until a week before her death. The condition of the lung in these cases is generally that of caseous pneumonia with little or no breaking down. At the same time that I had the girl under observation I had a similar case in the City of London Hospital for Diseases of the Chest, Victoria-park, and on making the post-mortem examination the whole of one lung and the greater part of the other were consolidated with caseous pneumonia, and there were in the most advanced lung only two small cavities about the size of plumstones. All these cases would come under the old category of acute pneumonic

phthisis, or, as we might now prefer to call it, acute inflammatory tuberculosis.

DRIFFIELD COTTAGE HOSPITAL.

TOTAL SUPPRESSION OF URINE FOR FOUR DAYS; NEPHROLITHOTOMY; RECOVERY.

(Under the care of Dr. J. L. BELL and Mr. ALFRED PARKIN.)

CASES of recovery from total suppression of urine are so seldom recorded that it is worth while to put on record the following instance. The case operated on by Mr. Clement Lucas[1] is perhaps one of the best-known examples of the value of nephrotomy in suppression of urine due to calculus. In that case one kidney had been excised four months before for calculous disease, and when the patient presented himself again with suppression the other kidney was examined, a large calculus found, and removed with the best results. Sometimes, however, the stone is of small size and has become impacted in the ureter lower down beyond reach from the lumbar wound. In such cases operation has yielded very good results. Even when the stone has passed into the lower part of the ureter its removal has been successfully accomplished. No patient should be permitted to die without exploratory operation when calculous obstruction is suspected, for if the calculus is not found in the renal pelvis an opening into the pelvis will suffice to give exit to the retained urine, the resulting fistula being necessarily kept open. The literature of surgery now records recoveries after the removal of stones from the ureter following dilatation of the urethra and suprapubic cystotomy with further incision of the ureter. Stones have also been removed through the rectum and through the vagina, whilst higher in the ureter direct incision after stripping up the peritoneum, or after incision of the peritoneum in front and again over the ureter, has been successfully practised; therefore no case can be regarded as beyond the help of the skilled surgeon. The successes which have been attained in the surgery of this part of the body during recent years have been as brilliant as those attained in any part of the body.

A man aged fifty-six years had, on and off, suffered from pain in both loins for years. One year ago he passed some blood in the urine and as the pain at this time was mainly confined to the right side he was advised to have that kidney explored, but declined. After this the pain left the right side and began to be more persistent on the opposite side, but he did little for it besides taking an occasional bottle of medicine. On Dec. 18th, 1895, he was seized with severe pain in the left loin, and called in his medical man who relieved the pain. He was then seized with a severe attack of sickness, and began to feel weak and drowsy. Four days later he was seen by Dr. J. L. Bell, who made arrangements for his removal to Driffield Cottage Hospital. No urine was passed from the onset of the pain, and none could be obtained by the passage of a catheter on several occasions. When seen by Mr. Parkin on the fourth day at the hospital the man was in a drowsy condition; he answered questions tardily, and often got confused before finishing a sentence. He had no pain, and only wished to be left alone, as he felt so weak. On examination of the loins there was slight tenderness to pressure on the left side, but no definite swelling. The tongue was dry and furred. The pulse was 90, full and strong. The body, which was very muscular, was perspiring freely. Under chloroform the bladder was found to be empty, and examination by a sound was negative. The left renal region was explored by an oblique incision, and the kidney when reached was found to be enlarged, hard, and of a dark colour. Incision of the cortex was followed by a free discharge of urine and most profuse hæmorrhage, which was so severe that it appeared as though the life of the patient was threatened. Examination of the interior of the kidney revealed no stone, and as the organ was too deeply situated to allow of the pelvis being reached in this way the wound in the kidney was firmly plugged with a sponge to control the hæmorrhage, sutures being of no use for this purpose, as they at once cut through the very soft kidney substance. The pelvis was explored from behind, and with some difficulty there was removed a conical uric acid calculus, measuring one and a half inches by one inch, which was impacted in the top of the ureter by its small end. The wound was sewn up and the patient returned to bed in a collapsed condition. Free drainage for urine was supplied at the posterior end of the wound. At the end of forty-eight hours the renal plug was removed; this was not followed by any hæmorrhage. A most copious discharge of urine took place after the operation, as much as four pints per diem being the estimated quantity. On Dec. 26th about ten drachms of clear urine were passed by the urethra, and this quantity gradually increased until by Jan. 14th, 1896, the lumbar wound had healed. A sinus formed four days later, but this closed on Feb. 1st, and since then the urine has all passed naturally in good volume and healthy in character. Convalescence was delayed by an irreducible right inguinal hernia becoming strangulated on March 13th, but the strangulated portion was reduced under chloroform, further treatment in the condition of the patient at that time not being thought desirable. The man is now quite well and strong and follows his usual avocation. There was at no time any trouble with the wound, which healed by primary union.

Remarks by Mr. PARKIN.—This case resembles in some particulars one described by me in THE LANCET[2] in which recovery took place after operation at the age of seventy-four years. It is obvious that if the obstruction can be removed sufficiently early there is every hope of a rapid recovery, whereas, by medical treatment alone the prognosis is utterly hopeless in such cases. The diagnosis of the proper side to explore in obstructive renal suppression is often very difficult. The patient's mental state renders his answers to questions unreliable; his friends frequently confuse the right with the left side; so that, in the absence of a definite tumour the only reliable point is the elicitation of tenderness on deep pressure over the renal region. Even then mistakes are possible. The kidney itself in both my cases was so congested that the most alarming hæmorrhage took place on opening it up. It would be better to make straight for the pelvis as the most likely place for the impaction of a calculus. Recovery, as a rule, is rapid, the mental state taking a few days only to return to its normal condition; and this is coincident with an unusually large excretion of urine, which does not interfere with rapid healing of the wound, provided only that the muscles are carefully sutured together. In this instance, convalescence was delayed by an obstinate cystitis, caused probably by frequent catheterism before the operation. From the history of the patient one would conclude that the opposite kidney had been destroyed or rendered functionless by calculi of a similar nature; the hypertrophy of the left kidney noticed at the operation, as distinguished from the enlargement by distension, quite bears out this view.

[1] THE LANCET, Jan. 17th, 1891, p. 144.

[2] THE LANCET, Sept. 16th, 1893.

Reviews and Notices of Books.

The Composition of Expired Air and its Effects upon Animal Life. By J. S. BILLINGS, M.D., S. WEIR MITCHELL, M.D., and D. H. BERGEY, M.D. Washington: The Smithsonian Institution. 1895.

ALTHOUGH physiologists have for more than fifty years been investigating the effects of re-breathed air on animals they are not yet by any means unanimous in their conclusions. For instance, Brown-Séquard and d'Arsonval published numerous memoirs in French periodicals from 1887 to 1894 asserting that expired air has the power of producing toxic phenomena. They found that the moisture condensed from the breath of men and animals was fatal to rabbits which had received intra-vascular or subcutaneous injections of doses varying from 12 to 40 c.c. They also experimented with rabbits kept each in separate vessels, several of which were successively connected with one another in series, and they found that when air was slowly drawn through the apparatus the last animal in the series always died first, the reason being, in their opinion, because it had inhaled the impurities communicated to the air by all the preceding animals of the series. Some of these results were confirmed by Merkel in Germany, but all of them were apparently contradicted by the experiments of Dastre and Loye, von Hofmann-Wellenhof, Lehmann, and Jessen, and in England by those of Dr. J. S. Haldane and Dr. J. Lorrain Smith (*Journal of Pathology and Bacteriology*, 1892-93). In

order, if possible, to cast more light on this vexed question a scheme of experimentation was prepared by Dr. Billings and Dr. Weir Mitchell, and was carried out by Dr. Bergey in the laboratory of hygiene of the University of Philadelphia. The memoir under consideration contains a full description of the numerous and varied experiments which were performed. The investigators were ultimately of opinion that in expired air there is no peculiar poisonous organic matter and that such injurious effects as were observed in the small animals subjected to experiment were due entirely to the diminution of oxygen or the increase of carbonic acid. They considered that the discomfort produced by crowded ill-ventilated rooms in persons not accustomed to such an atmosphere is not due to the excess of carbonic acid, but principally to the high temperature and to unpleasant odours derived partly from cutaneous excretions. No direct investigation of this part of the subject seems to have been undertaken, although the authors mention Dr. R. Angus Smith's well-known experiments in which he himself and other persons remained in an air-tight chamber until the feeling of oppression was very marked. The researches of the American physiologists were conducted between December, 1893, and the beginning of March, 1895; they are an important contribution to our knowledge of the respiratory function, and when further developed they will be of much practical interest to sanitarians.

LIBRARY TABLE.

THE calendars of most of the London medical schools lie before us, and apart from the information which they give respecting the medical curriculum some of the schools preface their information with a brief account of their ancient foundations. The historical notes relating to St. Bartholomew's, Guy's, St. Thomas's, and Westminster Hospitals are full of interest and should be perused by all medical students, whether attached to these hospitals or not. The St. George's Hospital Calendar gives a brief statement of the rules which regulate entrance to the profession, and the London Hospital Calendar has a brief note on "The Choice of a Medical School." We have also received the Calendars of St. Mary's and Charing-cross Hospitals.

While the question of a teaching University for London is on the *tapis* the sketch of the origin and history of the University of London, which forms a preface to the Calendar, will be read with interest, as will also the Royal Charter of 1863 and the Supplemental Charter of 1878. Besides containing information relating to the degrees granted by this University the Calendar gives the examination papers set during 1895-96. These, we believe, can also be obtained separately, price 1*s*. The Calendar of the Royal University of Ireland is issued with a supplement containing the examination papers of 1895. In the Calendar issued by Queen's College, Galway, will be noticed some alteration in the statutes referring to scholarships. From the beginning of the session 1896-97 all scholarships and prizes will be open to students of either sex; junior scholarships in Arts of the second year will be tenable for one year only. After the close of the session 1897-98 the third year's scholarship in law and the senior scholarship or exhibition in the same subject will be abolished. In common with some of the other Calendars, that for Durham University also gives the examination papers set during 1895 for degrees.

Aids to Medicine. Parts I., II., III., and IV. By NORMAN DALTON, M.D. Lond., Physician to King's College Hospital. London: Baillière, Tindall, and Cox. 4*s*. 6*d*. per volume.—This little work, in two volumes, forms part of the useful Students' Aid Series and seems to us to be well done. Of course, a subject such as medicine cannot be compressed into a small compass without omitting a great deal, but Dr. Dalton seems to have been able to keep the salient points. Diagnostic points and pathology are clearly set out, though we observe no warning under the heading of mitral stenosis of the liability of the beginner to mistake the presystolic murmur for the first sound and the first sound itself for the second. Neither do we see why Dr. Dalton has included functional albuminuria and paroxysmal hæmoglobinuria under the heading of Diseases of the Kidney, unless, like the gentleman who was asked about the "yorker," he does not very well see what else you could call them. These, however, are slight blemishes, and we think the book will lighten the weary way of the student very considerably.

Surgical Emergencies, together with the Emergencies attendant on Parturition and the Treatment of Poisoning: a Manual for the use of General Practitioners. By PAUL SWAIN, F.R.C.S. Eng. Fifth Edition. London: J. and A. Churchill.—This is the fifth edition of an admirable little book, and the only thing against this class of work that we have to say is that the book and the emergency are rarely to hand simultaneously. The book has been brought well up to date, for in the chapter upon the abdomen recent methods of resection are given and an account of Murphy's button added, though no mention is made of the other methods of approximation. There is a good chapter upon asepsis and antisepsis, while the chapter upon splints and dressings ought to be found very useful by those who have for some time left the hospital.

A Manual of the Modern Theory and Technique of Surgical Asepsis. By CARL BECK, M.D., Visiting Surgeon to St. Mark's Hospital and to the German Poliklinik of New York City, &c. Philadelphia: W. B. Saunders. 1895. pp. 306.—If any proof were needed that surgical asepsis, as distinguished from surgical antisepsis, is becoming increasingly common, it might certainly be found in the large number of works recently issued which deal with the methods to be employed in rendering and keeping aseptic the instruments and materials which will come in contact with the wound. This little volume can be recommended to any who are desirous of learning the details of asepsis in surgery, for it will serve as a trustworthy guide. A chapter is devoted to a description of those micro-organisms which are of importance to the surgeon and is illustrated by neat reproductions of micro-photographs. The importance of aseptic clothing for the surgeon and his assistants is insisted on, and the author advises that linen caps should be worn. We are very glad to see that the subject of aseptic subcutaneous injection is considered. Hypodermic needles are frequently used for a succession of cases with no other cleansing than a slight washing in water. Septic sequelæ of subcutaneous injections are found to be by no means rare if they are carefully looked for. The book forms one volume of Saunders's "New Aid Series."

Disease and Defective House Sanitation. By W. H. CORFIELD, M.D., F.R.C.P. London: H. K. Lewis. 1896. Pp. 55. Price 2*s*.—Books of this class are indispensable to medical men and sanitarians, and the present work, which contains the substance of two lectures delivered by Professor Corfield before the Harveian Society of London, deserves to be widely read. The author's extensive experience as a medical officer of health and as a consultant in reference to insanitary buildings in various places have provided him with an abundance of material from which he has now selected typical cases, copiously illustrated with drawings and diagrams. Among the diseases which prevail where the drains and sanitary fittings are defective or out of order, sore-throats, diphtheria, and enteric fever take a foremost place. Professor Corfield also considers that a long-continued and almost unnoticed escape of coal-gas may cause sore-throats and conditions of ill-health which have been

described as blood-poisoning. The example swhich he quotes are very instructive.

La Distomatose Pulmonaire par la Douve du Foie: Contribution à l'étude des Hémoptysies Parasitaires. Par HILARIO DE GOUVÈA. (*Hæmoptysis in the Human Subject caused by Distoma Hepaticum in the Lung.* By Dr. H. DE GOUVÈA.) Pp. 46. Paris: L. Bataille et Cie. 1895.—The patient in this case was a French naval officer, twenty-eight years of age, who while in his ship at Rio de Janeiro was seized with rigors accompanied by high temperature. In four days these symptoms passed off and were succeeded by cough and slight hæmoptysis. He was at once invalided and sent home to France in the mail steamer under the care of Dr. De Gouvèa. During their voyage, on the eighteenth day from the commencement of the illness, he coughed up an actively moving distoma an inch long, and ultimately regained his health. The parasite was shown to Leukart, the well-known helminthologist, who confirmed the opinion of Dr. De Gouvèa that it was distoma hepaticum.

Contribution à l'étude du Psidium Pomiferum. Par JOSEPH KHOURI, Lauréat de l'École Supérieure de Pharmacie à Montpellier. (*The Guava Tree, with Especial Reference to its Pharmacological Applications.* By Mons. JOSEPH KHOURI.) Lille: Le Bigot Frères. 1895.—Various parts of the guava tree are employed medicinally by the natives of the tropical countries where it grows. Mons. Khouri recommends the leaves as a remedy in diarrhœa and dysentery. They should be dried at a gentle heat, powdered in a mortar, sifted, and made either into infusion or tincture.

Handbook of the Diagnosis and Treatment of Skin Diseases. By ARTHUR VAN HARLINGEN, Ph.B. (Yale), M.D. Emeritus Professor of Dermatology in the Philadelphia Polyclinic. Third Edition. Pp. 577. Philadelphia: P. Blakiston, Son and Co.; London: Kegan, Paul, Trench, Trübner and Co., Limited. 1895.—This is a thoroughly practical and serviceable work, in which the diagnosis and treatment of skin diseases are described in a comprehensive and satisfactory way. As it was the author's intention to confine himself to the clinical aspect of his extensive subject and to include some familiar integumentary lesions which cannot be properly reckoned as skin diseases he has made very few references to histology or formal systems of classification, preferring a strictly alphabetical arrangement which begins with achroma and acne, and concludes with yaws and zona. In addition to numerous illustrations in black and white there are four coloured plates, the last of which, however, representing the appearances of variola, measles, scarlet fever, and roseola, is by no means effective and would have been better omitted. Under the head of Rubella the differences between the eruptions of that disease, of scarlet fever, and of measles are described at some length, and it would have been a useful addition if a place had been found for similar particulars of the distinction between variola and varicella.

New Ground in Norway; Ringerike, Telemarken, Saetersdalen. By E. J. GOODMAN, author of "The Best Tour in Norway." With fifty-six illustrations from original photographs by Paul Lange. London: George Newnes. 1896.—Mr. Goodman has many qualifications for what he seems to have made a special *métier*—that of instructing his compatriots how to make a holiday trip in Norway with the minimum of cost in time, trouble, and cash, and with the maximum of enjoyment and benefit for body and mind. In the first place he has been many times over the ground himself and by every conceivable mode of conveyance; secondly, he knows, not merely what the British tourist of all ages and either sex requires in the matter of accommodation, sustenance, and creature comforts, but also where these are best provided for *en route;* thirdly and lastly he is a nature-worshipper and an artist quick to seize those objects that impress the beholder favourably and apt at describing them or reproducing his own feeling for them in lively and fluent English. We had occasion to note these qualities in our review of his "Best Tour in Norway" (already in its third edition), and we have now to acknowledge them as equally prominent in this his supplementary volume. "New Ground in Norway," we should have thought, was not very easy to find after the run that has been made within the last decade on the Scandinavian peninsula, but found it has been, not primarily by Mr. Goodman, as he candidly admits, but so freshly and fully described by him as to make him, for the tourist world, something more than a mere pioneer. It is the Norway of the South, particularly its interior, that he invites his readers to explore with him, and certainly he has succeeded in framing and filling in from that region a most attractive series of tableaux, natural and social. On one point he is at pains to anticipate and relieve the not unnatural misgivings of the English-speaking visitor—that of sanitation. Inland Norway has not had the best reputation for cleanliness and hygienic self-respect. But, as he shows, there has been a signal advance on traditional usage in these matters, even in the rural districts, and the account he gives of the sanitary condition of Telemarken and Saetersdalen ought to set the mind of their hesitating explorers at rest. We would call attention, more particularly, to his remarks at page xv. of his introduction and again at pp. 129. 141, and 193 in the body of his book as calculated to remove the doubts of the profession when consulted as to whether or not a tour in South-West Norway is to be recommended in health or convalescence. A concluding word is called for by the artistic merit of the illustrations taken on the spot by an accomplished photographer.

Analytical Records
FROM
THE LANCET LABORATORY.

"VENSTORIA."

(THE HYGIENIC FOOD CO., 7, GRANT-ROAD, LOWER ADDISCOMBE-ROAD, CROYDON.)

THE claims made in favour of this preparation as a food are exceedingly numerous, but no analysis is published upon which any idea of its food value can be gained. According to our examination and analysis its composition is in close agreement with ordinary wheaten flour. Thus the results obtained were as follows:—Moisture, 12·74 per cent.; albuminoids, 13·23 per cent.; and ash, 0·75 per cent. There was a very small proportion of fat. We fail, therefore, to see what advantage it possesses over properly prepared wheaten flour of good quality or wherein it has any special claim to be a "hygienic food."

NEW "TABLOIDS" AND "SOLOIDS."

(BURROUGHS, WELLCOME, AND CO., SNOW HILL-BUILDINGS, E.C.)

"Soloids" is the name which Messrs. Burroughs, Wellcome, and Co. have given to those compressed drugs containing poisonous substances such as corrosive sublimate, which are very useful for the instant preparation of antiseptic solutions. Their shape is quite distinct from the tabloid, the former presenting a cone shape—i.e., with one surface perfectly flat—while the latter presents two convex surfaces. The one, in fact, is plano-convex and the other bi-convex. In addition the soloid contains a soluble blue colouring matter, which instantly dissolves in water, producing a blue fluid. The following soloids, of which we have received specimens, are prepared: zinc chloride soloids, 1 gr., for the preparation of caustic or antiseptic solutions, useful also (one

soloid in one fluid ounce of water) as an astringent for application to the eye or as an injection in inflammatory or catarrhal affections of the mucous passages; corrosive sublimate soloids, 1·75 gr., one of which dissolved in four ounces of water gives a strength of 1 in 1000; silver nitrate soloids, 1 gr., in strong solution as a caustic or in the proportion of one grain to one ounce of distilled water as a lotion or collyrium; potassium permanganate soloids, 5 gr., serviceable for the preparation of an antiseptic and deodorant, and, as is suggested, as an antidote in phosphorus poisoning. Important recent additions to the list of "tabloids" are represented in uranium nitrate tabloids and piperazine tabloids, specimens of which we have lately received. The former salt has been used, our readers will remember, in the treatment of diabetes, and the latter is said to offer advantages over lithium salts as a solvent of uric concretions.

"EXCELSIOR" SCOTCH WHISKY.

(MARGRAVE BROTHERS, BRIDGE-STREET, LLANELLY, S. WALES.)

On submitting this whisky to analysis the following were the results obtained: absolute alcohol, by weight 41·05 per cent., by volume 48·48 per cent., equal to 84·96 per cent. proof spirit; extractives, 0·39 per cent.; ash, *nil;* acidity, 0·033 per cent. (reckoned as acetic acid). The sample, as evidence of its maturity, was soft and mellow to the taste while not lacking the peculiar flavour of skilfully blended spirit. It is evidently a genuine malt spirit, which, on account of its purity and wholesomeness of character, is well adapted for medicinal or dietetic purposes. This conclusion is justified, not only by the fact of its freedom from crude products, but also because of the practical absence of acidity.

New Inventions.

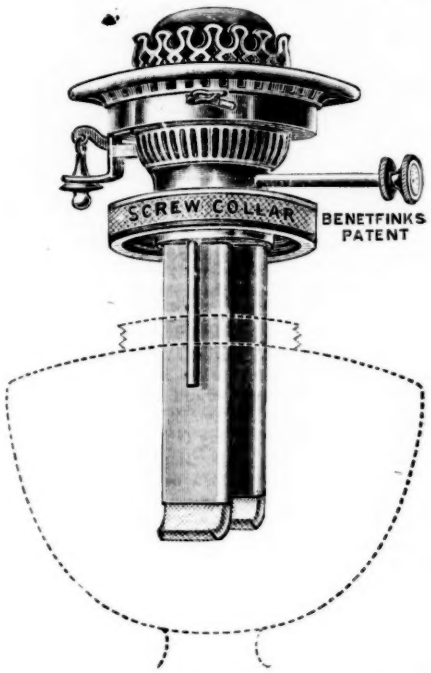
A NEW UTERINE PROBE.

I DARESAY most practitioners who have had occasion to apply fluid medicaments to the cervical canal by means of cotton wool wrapped round the end of an ordinary uterine sound or Playfair's probe have suffered both in patience and temper when endeavouring, perhaps in a hurry, to remove the soiled wet wool, which only seems to cling closer to the bulbous end of the sound the more it is pulled at. Accident showed me a way out of the difficulty. Having no sound, I found a bit of copper wire, doubled and twisted it, and used it as a substitute. I was agreeably surprised to find the ease with which I was able to unscrew it out of the pledget of wool. I hunted the various illustrated catalogues to see if I could get an instrument of the sort to buy, failing which I had the one here figured made for me by Messrs. Arnold and Sons. It answers its purpose admirably and will be found a gynæcological luxury. I beg to apologise beforehand to the gentleman, whoever he may be, whose prior invention I have appropriated.

Cootehill. T. H. MOORHEAD, M.D.Dub.

THE BENETFINK SAFETY LAMP.

WE continue to receive evidence of the correctness of our conclusions in regard to what we considered were the essential points of construction in a paraffin lamp in order to render it safe. If it were otherwise we should fail to understand why lamps constructed on these lines have again and again been submitted to us for inspection since the report of "THE LANCET Analytical and Sanitary Commission on Dangerous Paraffin Lamps" appeared in our issue of Jan. 4th, 1896. That Commission dealt exclusively with cheap lamps, but incidentally it was also shown that more expensive lamps were in many respects gravely defective. The defects consisted chiefly in the means adopted of attaching the burner to the reservoir and in the construction of the wick tube. We have recently had brought to our notice a lamp of admirable design which, according to a series of experiments carried out on the same lines as those recorded in the Commission, is so constructed as to obviate the dangers arising from the structural defects already alluded to. The lamp is made by Messrs. Benetfink of Cheapside, E.C., and its



construction will be made clear from the accompanying illustration. The most important innovation in regard to its construction is the method of attaching the burner to the reservoir. It consists of a heavy screw collar, which, when "screwed home," cannot possibly get loose and therefore detached from the reservoir. The collar is further provided with a cork washer, which presses tight upon the rim of the screw of the reservoir. The necessary inlet to allow the displacement of oil is a very tiny hole, which, while sufficient for allowing the free flow of oil through the wick, does not permit the escape of the oil should the lamp be upset. The lamp is known as the duplex, and both wicks are provided, as will be seen in the illustration, with a wick tube descending nearly to the bottom of the reservoir. This provision prevents the escape of oil, so frequently a cause of disaster, through the wick itself. Besides this, the lamp is provided with an automatic extinguisher. In short, this design fulfils all the requirements of a lamp that can be regarded as safe according to the experience of THE LANCET Commission, and actual practical experiments made with it have confirmed this view.

THOMAS WAKLEY,

THE FOUNDER OF "THE LANCET."

A BIOGRAPHY.[1]

CHAPTER XXXV.

Wakley Re-elected for Finsbury Unopposed.—His Consistently Liberal Views.—The Debate on Lord Mahon's Copyright Bill.—Wakley Ridicules the Claims of Authors.—Punch and its Criticisms of Wakley.—Tom Hood speaks for Authors.—Death of Mr. Henry Wakley of Membury.—The Game Laws.—A Fracas in the House.—Mr. Wodehouse Apologises.—The Great Courtesy of Sir Robert Peel.

IN 1841 the long Melbourne Ministry came to an end—an ignominious end, for a direct vote of want of confidence was carried against the Government. Wakley submitted himself for re-election to the Borough of Finsbury, and was returned unopposed. He neither canvassed nor issued any lists of his supporters, nor did he, either directly or indirectly, countenance the solicitation of votes for him by others. He signified to his constituency through a small committee of local men his willingness to serve the borough again in Parliament if his services in the past were considered to justify his re-election. Upon being nominated he addressed the constituency in three or four different localities, once in each locality. In the course of these speeches he first pledged himself to be invariably true to the general Radical progressive programme as his constituents had formulated it in their original letter inviting him to become their Member.[2] He then pointed out the view that such a general programme would compel him to take of the more important matters impending in public affairs and in the cause of medical reform. Lastly, he recalled to his electors the fact that he was in Parliament to serve them more especially, though in general politics he was pledged to a general attitude, and he desired to know what their views were, firstly, on such matters as concerned all men, secondly, on such particular matters as concerned the denizens of Finsbury. This confidence in his electorate proved admirable policy, as his seat was never challenged from 1837 until his resignation in 1852, a fact which was most remarkable in 1841, when the muddling and shilly-shallying of Lord Melbourne's Government led to a notable victory for the Tories under Sir Robert Peel. Neither the Tory reaction nor the fact that Wakley had allowed himself to criticise his leaders jeopardised his position with his supporters.

During the next ten years, that is, from 1841 until the commencement of 1852, Wakley's attendance at the House was assiduous, while he served on a large number of important committees. He was, however, no longer so frequent a speaker. This was not because he was less ardent in his championship of the causes that he had taken under his particular care, but because the Tory Government of Sir Robert Peel and its successor, the Opportunist Government of Lord John Russell, offended his particular susceptibilities—doubtless now grown a little blunter—less than the Whig Government of Lord Melbourne had done. Many of the topics, to which allusion has already been made as engaging the attention of Parliament between 1837 and 1841, remained in an unsettled condition during the next decade and deferred Bills or amended Bills dealing with them came before the House with regularity. On various public health matters, such as the establishment of public municipal abattoirs and the prevention of intramural burials, Wakley was several times heard. The Chartist agitation was still alive, and where the demands of its promoters could be met by constitutional means in the House Wakley's voice was ever ready. He presented numerously signed petitions complaining of the treatment to which the political prisoners, as he insisted upon regarding them, were subjected in provincial gaols, and on one occasion, when supporting Duncombe in a motion for a committee to inquire into the condition of convicts, he inveighed against the persecution of political malcontents. But he remained as resolute as heretofore not to be dragged into any position that could be interpreted as unconstitutional opposition to the laws of his country. He had more than one occasion to speak in favour of the ballot, and whenever he did so his remarks were worth listening to, for his belief that open voting often resulted in the return of the weaker candidate was very implicit and generally found vent in amusing terms. His dislike to the legal profession was exhibited in such various forms, as a speech against the granting of pensions to Lord Chancellors, a disagreement with Lord Ashley (the philanthropic Earl of Shaftesbury) whose championship of the rights of children he strenuously backed, on the question of the appointment of legal Lunacy Commissioners, and numerous speeches against the acts and methods of the Poor-law commissioners. On one occasion he stigmatised the average unpaid provincial magistrate as "an incompetent oaf," and at all times and in all places he displayed towards the legal profession a curious intolerance.

In April, 1842, what was and is known as Lord Mahon's Copyright Bill came on for discussion in the House. Without mentioning various small Acts dealing with replicas of sculpture, with dramatic rights, and with the publication of engravings, the copyright law of the kingdom was at that time administered under an Act passed at the end of the reign of George III. (1814, 54 Geo. 3, c. 156). This Act gave copyright in books for a term of twenty-eight years certain and the residue of the life of the author. Lord Mahon's Bill provided for the extension of the term of copyright to forty-two years certain, and proposed, also, to extend it beyond the life of the author should he be living at the end of that term. The measure was substantially the same as Serjeant Talfourd's Bill which had been introduced into Parliament in 1836 by the learned and eloquent author of "Ion," and had for its worthy object the consolidation or amendment of the law relating to literary and artistic property of all sorts, the extension of the term of copyright in such property, and the provision of penal clauses in protection of the privileges of the legal owners of the same. Serjeant Talfourd's Bill had been shelved, one of the most relentless of its critics having been Wakley, who held that the attempt to protect the author would militate against the interests of the printer, the publisher, and the people without doing the protected producer any good whatever. When Lord Mahon (afterwards Earl Stanhope and Under Secretary of State for Foreign Affairs) undertook the conduct of Serjeant Talfourd's Bill he found in Wakley the same bitter opponent. The Bill came on for second reading on April 6th, 1842, and a protracted debate ensued. The proposer of the motion was followed by Macaulay, who in no very enthusiastic way enforced the claims of authors. Wakley, in the course of a long speech designed to bring the claims of authors into ridicule, recited Wordsworth's most namby-pamby poems, "I met Louisa in the shade," and the same poet's Address to a Butterfly. "Give a poet an evening sky, dew, withering leaves, and a rivulet and

[1] Chapters I., II., III., IV., V., VI., VII., VIII., IX., X., XI., XII., XIII., XIV., XV., XVI., XVII., XVIII., XIX., XX., XXI., XXII., XXIII., XXIV., XXV., XXVI., XXVII., XXVIII., XXIX., XXX., XXXI., XXXII., XXXIII., and XXXIV. were published in THE LANCET, Jan. 4th, 11th, 18th, and 25th, Feb. 1st, 8th, 15th, 22nd, and 29th, March 7th, 14th, 21st, and 28th, April 4th, 11th, 18th, and 25th, May 2nd, 16th, 23rd, and 30th, June 6th, 13th, 20th, and 27th, July 4th, 11th, 18th, and 25th, and Aug. 1st, 8th, 15th, 22nd, and 29th respectively.

[2] See Chapter XXVI. of this Biography.

he would make a very respectable poem always," said Wakley. This remark was greeted with much laughter. "Why, anybody might do it!" (Laughter and cries of "Try it.") "Try it! Why, he had tried it (great laughter), and there (pointing to Monckton-Milnes) is an honourable gentleman who has also tried it and is a poet of the first water," and he continued by challenging the first Lord Houghton to disagree with his estimate of much that was written. "I myself could string such compositions together by the bushel. I could write them by the mile." Wakley's speech was really more a running stream of badinage than the unfolding of a serious argument. His general thesis was that authors got quite enough already, but he did not bring forward much logic to prove it. He questioned the worth of the labours of an author compared with those of a scientific man? The latter's work was unprotected and freely accrued to the public good. He declared that Milton, Bacon, and Shakespeare had worked and made their greatest efforts more for honour than gain. "Cannot authors of the present day," he concluded by asking, "be stimulated to such exertions as had been made by these men without being allowed to thrust their hands into the pockets of the people?"

Monckton-Milnes, in spite of the flattering allusion to himself, severely blamed the manner in which Wakley had treated the subject in selecting for quotation as samples the weakest works of so admirable a poet as Wordsworth. He considered the tone and manner in which the Member for Finsbury had held them up to the ridicule of the House in very bad taste. Some curious divisions on different amendments then followed, more than one being carried against Lord Mahon. One of the essential principles of the Bill was attacked in an attempt made to amend out of it the principle that copyright should run under certain circumstances after the author's death for the good of his surviving family. Lord Mahon, defeated on one such provision, proposed the insertion of a clause providing for the sanctity of copyright for seven years after the death of the author, should this make up a longer period than forty-two years. The possessor of the copyright was to have protection for forty-two years certain or for life and seven years more, whichever was the longer term. This was opposed by Macaulay, but carried by Lord Mahon by 91 votes against 23. Wakley was, of course, in the "No" lobby. Macaulay himself, however, proposed that the extended term should be "forty-two years certain." This was opposed by Wakley and Villiers, among others, but was carried by 96 to 17. In no less than three of the divisions on this stage of the Bill, Wakley acted as teller, while Gladstone and Disraeli both spoke. Macaulay, however, moulded the Bill.

Wakley's view of the copyright question was certainly inspired by his close acquaintance with one side of it only. He had been bitterly attacked for infringing Abernethy's copyright by the publication of his surgical lectures in THE LANCET. He had defended his action, successfully as it happened, on the grounds that lectures spoken in public capacity ought to be printed for the public good. He now tried to bring this principle home to all literary and artistic productions, dividing the output of the author and the artist into two classes—the bad, which could not be reasonably protected, and the good, which reflected such honour upon, and perhaps brought such profit to, its creator that it would be ridiculous to give him a long monopoly in its sale or to bring any hereditary principles to bear upon it lest either process of protection should debar the public from profit.

It can be readily believed that many authors did not approve of the way in which their claims were thus coolly set aside, and the press was very unanimous in finding Wakley's arguments faulty and his attack upon Wordsworth a grave error in manners. *Punch* made immense capital of so inviting a theme. The great satirical journal was founded on July 17th, 1841, and Mark Lemon seems to have seen at once in Wakley an excellent object for attack. The reason for this is obvious. Wakley was well known throughout England by name, but in London, where the London Charivari expected to obtain its principal circulation, he was by this time an exceedingly familiar personality. As editor, coroner, political reformer, and energetic vestryman he was known by hearsay to the whole metropolis and by sight to a very large number of persons—to more persons, in fact, than other men of equal distinction in public affairs—for he was not a man who could be passed in the street unnoticed. All who saw Thomas Wakley striding along in the streets in his attempt to keep pace with his over-numerous engagements asked who he was, and once seen his was a figure and face not easily to be forgotten. Tall, erect, square-shouldered, and perfectly proportioned—a man of bulk, but yet of lightness—his frame bore the proofs of his great muscular strength and of his incessantly active life. His clean-shaven, florid face was replete with expression, the mouth always critical, whether smiling approval or sternly set in anger or concentrated thought, and the resolute blue eye alive to all that was presented to its gaze. His golden hair, worn in natural and lengthy clusters nearly down to his coat collar, was fine and waved in the little breeze that his energetic and springy gait stirred up around him. To this sketch the detail must be added that he was always elaborately dressed in the fashion of the day, which fashion allowed of some personal splendour. The long surtout, with its rolled velvet collar, the low-cut flowered waistcoat, revealing the spotless frills of a shirt got up in the days of country bleaching grounds and manual wringing, the lofty crowned beaver and the nankeen trousers of a gentleman of the "forties" presented a gorgeous picture which the gentleman of these more restrained days cannot aspire to emulate. Wakley was undoubtedly in 1841 one of the most widely known men in London, so that in satirising him *Punch* had an easy task, for everyone knew who the joke was aimed at. Yet it was a tribute to his importance that *Punch* in an initial volume should have chosen him for an object of satire.

Save in one instance—the instance of Wakley's views on copyright—*Punch* was not very happy in setting any mark of ridicule upon Wakley. In 1841 Wakley was suspected of leaning towards the Conservatives and especially towards Sir Robert Peel. This was because, as has been seen, in the matter of reform he did not consider that Lord John Russell was prepared to go far enough or Lord Melbourne to move quick enough, while he held that the Chartists desired to go a great deal too far and too quick. This critical attitude offended certain members of each section of the Radical party, who, in hunting about for some stick to throw at the object of their temporary dislike, hit upon a droll accusation that Peel had been approached by Wakley with a view to office. This was the point of *Punch's* joke against Wakley—that, being a well-known Radical, he was at heart a Tory, or prepared from motives of self-interest to become one. Hence we find Wakley described as out of place and inserting an advertisement for any light job in the hope that it may catch the eye of Sir Robert Peel or Lord Stanley. Again we see him depicted as the seducer of Norma and her fellow-vestal in Bellini's opera of that name, which had but recently been heard for the first time in London. Lord Melbourne is the deserted Norma and Sir Robert Peel the newer love. These jokes, though neatly made, were unfair, because they grossly misinterpreted Wakley's political attitude, holding up his very sensible moderation as cynical self-seeking.

But Wakley's speech on the copyright question furnished *Punch* with a better opportunity. Here Wakley had evidently

blundered. He had dismissed the claims of authors cavalierly and on insufficient grounds, he had spoken contemptuously of the Poet Laureate whose years if not his fame should have protected him from such treatment, and, of course in joke, he had suggested that he could write bushels and miles of such stuff himself. *Punch* fastened on the assertion and announced the appearance of "Wakley's Warbler, being Finsbury Fragments by a Coroner" and gave as an imaginary specimen of Wakley's muse the following lines :—

TO MY LOVE.

The sun upgetting, The dews at setting,
The leafy treeses, The murmuring breezes,
The kisses glowing, The glances knowing,
The girls all crying, The men all lying;
They move the heart so That I can't part so;
And ere I know it I shine a poet.
O Amaryllis, Or Rose or Phillis,
Or as it may be My Poll or Phœbe,
Don't be so cruel, My darling jewel,
Come on not slackly, * * * * * * *
—Madam, your servant to command,
J. (*sic*) WAKLEY.

Tom Hood among authors stood up for his order in one of the latest essays that came from his pen. His kindly reproof of Wakley will be found in a volume entitled "Whimsicalities" which appeared two years before his death. Hood alludes thus to Wakley's facetious claim that he could write such stuff by the mile and string it together by the bushel :—

"Hark thee Thomas. ..... It must often have puzzled editors to account for the deluge of poetry, so-called, which of late years has poured into the Balaam-boxes of the periodicals. Indeed, there is no magazine or literary journal but from time to time has had to announce the utter impossibility of returning such contributions to the authors—just such an impossibility as beset Mrs. Partington when she attempted to send back the Atlantic. For our own part the phenomenon has been a standing wonder, as month after month (Hood speaks as editor of the *New Monthly Magazine*) we found our library table covered with fresh verse-rhyme enough to fill whole magazines. *Where* could it all come from! What sort of laborious creatures could thus keep spin, spin, spinning on, without profit and without encouragement, for not a hundredth—no, not a thousandth part obtained insertion. The mystery, however, is solved. The deluge of bad poetry, the rush of rhyme is accounted for, and editors in future will be able to attribute any extraordinary high tide of sing-song to its true source Astounding as it may seem, considering his multifarious occupations as Member of Parliament, Coroner, and Editor of a medical work, yet by his own confession, during the debate on the Copyright Bill, Mr. Wakley, besides spouting, sitting on bodies, and LANCET-guiding, has actually been composing poetry—not by the page or sheet, but by the standard mile and imperial bushel. It would of course be impossible to trace all the effusions of such a very prolific versifier; but personally we are convinced that we have been favoured with at least a few pecks, and rods, poles or perches of the manufacture of this new Thomas the Rhymer. All the anonymous pieces were his, of course, as well as those signed T. or W., and we venture to attribute to the same hand, on internal evidence, a few furlongs of poetry that have been sent under other initials."

The following are a few examples of the wide range of subjects on which Wakley considered that he had a mandate to speak in this Parliament, because anyone who aspired to be a typical exponent of progressive Radicalism must have an opinion on each and all of the points involved. On the question of enclosing common lands, which was under debate in April, 1842, he was naturally one of those who insisted on the right to enquire into the titles by which many of the territorial class possessed land enclosed by them but really dedicated in former centuries by use and custom to the public. It was a question with the details of which he was familiar, owing to the fact that his father, Mr. Henry Wakley of Membury, had been a Commissioner under the Act and a very prompt and thorough-going official. Mr Wakley senior was at this date still alive and, although he had reached the great age of ninety-two, was in full possession of his faculties and able to render practical assistance to his son out of his reminiscences. It may be mentioned here that he died after a very short illness on Aug. 26th of this year.

On certain points arising out of the by-laws existent at the Customs Offices Wakley spoke in 1842. He was ever anxious that the food of the people should be as lightly taxed as possible, and above all fairly taxed, for it was one of his standing arguments that material happiness led to moral rectitude as surely as moral rectitude led to the keeping of the law. He pointed out with a precision of detail unfamiliar to those who had not enjoyed the advantage of being born in a cider county that the dues on apples should not be entirely assessed by bulk. Unripe crab-apples could hardly be considered as equal in value to the same bulk of ribstone pippins, and he thought the House should attend to these matters, which were not such trifles to the poor consumer as they might seem.

In 1844 he is found vigorously supporting Duncombe, who presented a petition from Joseph Mazzini protesting against the action of Sir James Graham in opening letters addressed to Mazzini and his friends. The contents of these letters were alleged to have been communicated to Austria and so to have led to the death of certain of Mazzini's fellow-conspirators abroad, and it was felt by many, without need for expression of any opinion upon Mazzini's aspirations or tactics, that the proceeding complained of was an unworthy one.

On the question of the game laws Wakley felt strongly, and in 1845 he spoke in favour of John Bright's motion for the appointment of a Commission to enquire into their working. He presented numerous petitions on the subject, and took part in several rather heated debates, for the landlords were resentful of any attempt to enquire into their privileges or into the scale of punishment meted out to those who infringed those privileges. All his life long Wakley had been an ardent sportsman. He was the son of sportsmen. He had shot much as a boy, and the very first use he had made of his prosperity was to purchase a property which allowed him to practise his favourite form of sport. At the time of John Bright's motion Wakley was the possessor of a fine sporting estate at Harefield Park in the county of Middlesex on the banks of the River Colne, and four miles from Uxbridge, where he was in the habit of spending every minute that he could spare from his numerous parliamentary, official, and editorial duties, and where he was a strict preserver of game. In supporting John Bright in his attempts to obtain the remission of penalties for poaching Wakley had some difficulty, therefore, in showing that his attitude was consistent. He was twitted in the House by Lord Robert Grosvenor (afterwards Lord Ebury) with being himself an ardent votary of the sport, which could not be supported without the rigid enforcement of the very laws an inquiry into the working of which he was prepared to demand. Wakley replied by admitting to the House that he was a preserver of game, but gave at the same time an example of his treatment of poachers. He said that he would not allow any one to steal his pheasants, but that he would always feed a hungry man, and that the peasantry around Harefield were aware of this and preferred to go up to the house and ask for food to committing a felony. As a matter of fact, though Wakley modestly did not take the House into his confidence, it was quite well known throughout the country-side that he prosecuted poachers rigidly, but that, also, he invariably supported the wife and family of the delinquent until that unfortunate person, having paid the legal penalty, was free to look after his family himself. Nobody is strictly logical, and Wakley's conduct in these matters would certainly not have stood the test of a rational scrutiny; but at any rate he showed himself to be no hypocrite of Butler's sort, for if he

compounded with the sin of game-preserving he damned it at the same time.

For an aggressive man, which he undoubtedly was, Wakley's demeanour in the House was singularly ingratiating. It is easy for a man of colourless views or lymphatic temperament so to order his words and actions that they shall never give personal offence, and it is doubly easy for one who is lukewarm in his convictions. But Wakley was an ardent and thorough politician holding views on many points that were black in hue to the Tory glance, and gloriously rosy to his own; consequently he was not without his moments of extreme provocation. But he always kept his temper perfectly under control, and in the only fracas with which he was associated in Parliament he was the justly offended party.

In July, 1844, during one of the ever recurring debates on poor law amendment, the subject of rural incendiarism in the eastern counties came under discussion. Wakley tried to point out that these offences usually occurred in parts of the country where the educational standard was low and where squiredom was supreme. He referred especially to Norfolk. Mr. Edmond Wodehouse, a Norfolk man and one of the members for that county, hotly protested against this attack on landlords and said that there were other places where incendiarism was not unknown, *as the hon. Member for Finsbury could tell them himself.* Wakley rose and said: "I have been a Member of this House for nine years, and during that time I do not recollect that any hon. Member has had occasion to complain of any personal remarks made by me upon him. My object has always been to confine myself to the question before the House and never to utter a single word that should give any individual offence. I cannot say that the same conduct has always been extended to me But when hon. gentlemen permit themselves to descend in the course of discussions on public affairs to refer to the private life of other hon. Members and to cast imputations upon them in those relations, that is a course so contrary to the honour and dignity of the House that, being pursued, it becomes the duty of the Member so referred to to require an explanation in the presence of the House. It has occurred to me in the course of the discussion in Committee on this Bill to make some observation on the state of education in Norfolk and Suffolk—did I not also (added the hon. gentleman, turning to the hon. Member sitting on the bench beside him) allude to Middlesex? For I had no intention to make any invidious distinctions in the matter; I had no intention in the remarks I made to suggest any reflection upon any individual whatever. Sir, I have had during my life some difficulties to contend with. I came to this town unknowing and unknown. I fought my own battle, not always an easy one, and I have a family of children—sons. The remarks which the hon. Member for Norfolk used at the conclusion of his speech were these—I am certain of them, for I took them down at the time—'No one is more capable of giving an opinion on the subject of incendiarism than the hon. Member for Finsbury himself.' Now it seems too horrible to suppose such a thing as that the hon. Member intended these words to apply personally to me; that any hon. Member in the House, without being provoked by any remark of mine, should apply such remarks to me. I know that every man who has been engaged in the work of reform as I have been must be prepared for attacks on his public character; but I was not prepared for an unfair attack on my private character in this House. I never fought a battle unfairly in my life. There is not an act of my life from the first moment of my existence that I would not court inquiry into. And if any gentleman wishes to go into such an inquiry I will give him every facility in my power for pursuing the inquiry in the most minute details. Sir, these observations were applied to me publicly in this House; and if I did not dare to ask for an explanation of their meaning and to court investigation of their truth I should not dare to enter these walls again. I could not again presume to face this body of honourable gentlemen. I am therefore quite ready to go into an inquiry into the matter to which it is possible the words of the honourable member may refer. I have nothing to fear from inquiry; but I have everything to fear from insinuation when insinuation is made the vehicle of the foulest calumny that was ever cast upon the character of any man. At all events, there is but one proper mode in which I should deal with this matter. I do not intend to make this matter the subject for private quarrel or dispute with the hon. Member, for I have nothing to fear from publicity. I think I have the right to ask the hon. Member what meaning he attached to the words I have read to the House, as applied to me; and before I call upon him to do so I will state to the House the circumstances to which I believe they were intended to refer. Sir, it happened that I had the misfortune once to have my house burned.[1] I brought an action against the insurance company in which I was insured for the loss. They resisted that action, it went for trial, and the result of that trial was that every farthing which I went against the company for was given me by the jury. The present Lord Denman was my counsel; Lord Tenterden was the judge who tried the case; and after the trial one of the jurymen, who was himself a proprietor in the office, joined with some of my friends who had taken up the matter, and they subscribed the money to pay my expenses as between attorney and client. Sir, these are facts recorded in the papers of the day. I suffered very much then, and I have since suffered from aspersions which have been cast upon me in reference to this case. I have been most shamefully and cruelly used, and I trust that the House will not think that under the circumstances I have unnecessarily trespassed upon its time in calling its attention to this matter. I have made this appeal with the greatest possible pain, with the greatest possible reluctance, as you may readily suppose. I believe I mentioned that every farthing was recovered from the office and was paid. I throw myself, therefore, not on the humane consideration of the House, but upon its sense of justice, and I ask the hon. Member to state the meaning of the words he used, and which he applied to me; and I call upon him further, for my sake, if he knows anything of a reproachful nature against my character—if from any source or channel whatever he has heard anything injurious to me—I call upon him not to shrink from declaring it, but, on the contrary, to state it to the House without reservation."

Mr. Wodehouse replied that he was glad to have afforded the hon. Member an opportunity of giving a distinct explanation upon the matter he had alluded to—*a subject which had already remained too long in doubt.* After that explanation he felt it his duty to tender an apology. He desired to say that the hon. gentleman and his associates were too lavish in accusing landlords of selfishness. He trusted that the House were satisfied with the apology.

A dead silence prevailed when the Member for Norfolk resumed his seat, and after a momentary interval the Speaker put the question, "That this House resolve into the said Committee (a Committee of the whole House on the Poor Law Amendment Bill) on Monday next at 12 o'clock." This being agreed to, the House adjourned.

The event occurred on Saturday. On the following Monday Mr. Wodehouse rose and said: "Perhaps the House will allow me to say a few words upon a matter of personal interest to myself. It has been intimated to me that the explanation which I gave the hon. Member for Finsbury on Saturday was not as satisfactory as that hon. gentleman had a right to demand. I have no hesitation in saying that I then acted under an erroneous impression with

[1] See Chapters VI. and VII. of this Biography.

respect to the trial to which I referred. The hon. Member for Finsbury appears to me, by the explanation which he has since given, to have had a verdict distinctly in his favour. I therefore feel that as I may have been the instrument of injury to the hon. gentleman, it is now my bounden duty to do my best to be the instrument of reparation. It is a duty which I owe not only to himself in the first instance, but in the next place to all those who are connected with him by relationship, and lastly to all who are connected with him by public representation to make the explanation which I now make. And I hope the matter will not be permitted to go further, for I tender the explanation as due from one gentleman to another, and am obliged to the House for the opportunity it has afforded me of making this further explanation."

Sir R. Peel said: "The explicit declaration which has now been made must have convinced everyone that the hon. Member for Finsbury is an honourable and innocent man, and I think that hon. gentleman may retire from the House to-night with a full understanding that he has had complete reparation made to his injured feelings."

Mr. Wakley then said: "I cannot refrain from expressing my gratitude to the hon. Member for Norfolk for the kind explanation which he has given and offering my grateful acknowledgments to the House for the handsome manner in which they have treated me on this painful occasion. At the same time I beg to say that I receive the acknowledgment of the hon. gentleman with the spirit of frankness with which it had been made, and I feel convinced that he cast an imputation on me which he has not felt himself justified in doing under the circumstances which have since come to his knowledge. In saying this I am bound to state that I consider this acknowledgment will be most satisfactory to every member of my family."

This incident furnished Sir Robert Peel with an opportunity for the performance of a very graceful act. Estimating rightly the great pain that this sudden and wanton resuscitation of a gross imputation upon their father's character would be to Wakley's sons he addressed a long and eloquent letter to the eldest of the three, then a young man of twenty-three, in which he testified to the complete esteem in which the senior Member for Finsbury was held by the whole House. The letter was an eloquent eulogy on Wakley as reformer, orator, and Parliamentarian, and, coming from the most powerful and prominent statesman in the kingdom and a nominal political foe, formed a remarkable testimonial to Wakley's public merits.

(To be continued.)

THE SOUDAN CAMPAIGN.

BEYOND the exceptional meteorolcgical conditions—the heat, sandstorms, high wind and cyclones, and heavy rainfall, with their disastrous results on the newly-constructed railway, now repaired—there is little to record. The discomfort to the troops composing the Nile Expeditionary Force has been very great and has amounted to real hardship, but the health of the force has, on the whole, been very good. Owing to the unfortunate conditions that have prevailed of late the advance on Dongola has been delayed, but it must soon take place now, and it is certainly the desire of everyone that it should, for the monotony and discomfort of the troops render the service a very trying one. Cases of enteric fever—that scourge of armies in the field—are of occasional occurrence, and these, with a certain number of cases of heat apoplexy, diarrhœa, and dysentery, make up the most important medical features of the campaign. Happily the little epidemic of cholera seems to have pretty well died out. According to the latest returns from Cairo for Friday, Saturday, Sunday, and Monday last 115 fresh cases were registered in that city and 100 deaths, while in the remainder of Lower Egypt there were 33 fresh cases and 30 deaths. In Upper Egypt, to which the disease is now practically confined the deaths include that of a private in the North Staffordshire Regiment, and in the provinces of Assiout and Girgheh the number of fresh cases amounted to 255 and the deaths to 217. These figures, notwithstanding the temporary increase at Cairo, which is now abating, show a decrease in the number of deaths of 37 per cent. during the last fortnight, the daily average now being 87 against 121.

DR. A. G. BATEMAN AND DR. KINGSBURY.

WE have received for publication the following letter and enclosure:—

To the Editors of THE LANCET.

SIRS,—As solicitors for Dr. A. G. Bateman we will ask you to be good enough to publish in the next issue of your journal the accompanying "Apology and Withdrawal," signed by Dr. G. C. Kingsbury.

We are, dear Sirs, yours faithfully,

35, King-street, Cheapside, E.C., Sept. 9th, 1896. HEMPSONS.

APOLOGY AND WITHDRAWAL.

WHEREAS I, the undersigned, George Chadwick Kingsbury, of No. 8, Brighton-parade, Blackpool, Doctor of Medicine, recently published and circulated a pamphlet written by me entitled "Editorial Ethics, with Special Reference to the recent Medical Libel Action 'Kingsbury *v.* Hart.'"

And whereas such said pamphlet contained libellous imputations upon the honour and integrity of Dr. A. G. Bateman, of 49, Devonshire-street, Portland-place, London, W., who appeared as a witness in the said action of Kingsbury *v.* Hart on behalf of the *British Medical Journal*, of which journal the defendant (Mr. Hart) was sued as Editor, now I hereby declare that I am satisfied that there is absolutely no foundation whatever for any of these imputations, and I therefore hereby unreservedly withdraw and contradict them. I also sincerely apologise to Dr. Bateman for having made such imputations and for having caused the pamphlet containing them to be printed and published. I also desire to express my great regret for the annoyance which the publication of the said pamphlet must have caused Dr. Bateman, and I have agreed to print this apology and withdrawal at my own expense in this journal and the *British Medical Journal*, the *Medical Press and Circular*, and the *Medical Times and Hospital Gazette*, as the best amends which it is in my power to make to Dr. Bateman. At the same time I beg to be allowed to state that I did not intend to make any imputations upon the honour or integrity of Dr. Bateman and had not realised that the pamphlet could be so interpreted until my attention was called to the matter.

Dated this 29th day of August, 1896.

GEO. C. KINGSBURY.

Witness to the signature of Dr. George Chadwick Kingsbury,

ARTHUR NEWMAN, Solicitor, Manchester.

STRATHPEFFER.—A Home was opened on Aug. 25th by Lillian, Countess of Cromartie. The ground on which it is built was given by the Cromartie family, and a very large proportion of the cost of the building, which is entirely defrayed, has been paid by Miss Morrison Duncan of Naughton, who has given £1000. It contains twelve beds and is designed to give the benefits derived from the Strathpeffer mineral waters to the poorer classes.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 12, 1896.

THE recent scarcity of water in the East-end of London has once more raised the very vexed question of whether or not the water cistern is a desirable fixture in the house. To be discussed fairly the subject is obviously one that cannot be approached entirely from the sanitary point of view. It must also be considered from the point of view of convenience and comfort to the householder. When, for example, the supply is for some reason or other likely to become restricted for any length of time it is difficult to see how a cistern in the house can be dispensed with. In short, it can only be dispensed with when the supply is *absolutely* constant. Supposing that the water-supply of London were at all times greatly in excess of that required for all purposes, still it could never be regarded as being always "laid on" to the house of the consumer. To cite one instance, the repairing of mains in the event of leakage is an operation frequently involving several hours', if not days', work. In that case a large district might be without water for a serious, if not an inconveniently long, period of time. That, perhaps, is the only argument for the adoption and the retention of cisterns for storing water on a small scale for domestic purposes. From the sanitary point of view there can be little doubt that cisterns are contra-indicated and for reasons not far to seek. It is to be feared that most people not only give no attention to the cleanliness of a cistern, but do not even trouble themselves to find out whether it is situated amongst wholesome surroundings. And so, in many cases where the pollution of water has been suspected, startling revelations in regard to the position of the cistern and of the nature of its contents have on inspection been brought to light. Nor is the householder to be entrusted to carry out the periodical cleansing of the house reservoir properly unless he understands the responsibility attached to the task. He will probably stir up dogs that should be left sleeping, so that the last state of the water, at any rate for a time, is worse than the first, if his cleansing process be not well applied and thorough.

No matter how irreproachably pure a water-supply may appear to be, yet the continual passage of a large volume of it through a reservoir will invariably result in the deposition of more or less slime on the walls of the tank. This is due principally to the growth of algæ and other probably harmless vegetable matter. Indeed, this slime is accorded by bacteriologists certain actively virtuous qualities, not the least important of which is that of entangling microbes in its slimy interior. But it is in consequence of this very fact that the slime is found after a time to teem with organisms, and thus may prove an unexpected source of danger. Hence periodical cleansing is an imperative step. That the system of storing water is not without some redeeming features is also indicated by bacteriological experiment. Thus it has been shown that the storage of water for some time is an important factor towards reducing its bacterial impurity. In the case of cisterns, however, the pipes to the service tap commonly draw off the water from the bottom so that any beneficial effect derived from settlement would be worse than nullified, since the first water drawn off would contain the deposit and its entangled accumulations. It is not possible, in fact, that the wholesome effects of storage on a large scale could apply on such a small scale as in the cistern of the householder. The consideration of these and other facts leads but to one conclusion, and that is that 'storage' and settlement should be left entirely to take place at the sources of water distribution. In other words, the community should draw from one big cistern—the waterworks—and the interception of a small container can only be warranted on the ground of scarcity or irregularity of supply. Adequate storage at the company's works would dispense with the need of cisterns in the former case, but the necessity of some means of storage in the house would evidently become a necessity—if a regrettable one—in the latter.

It has been suggested that the difficulty would be completely met if a large expansion of the service-pipe in the house could be made. This expansion or box should of course be made large enough to meet the requirements of the house in the event of the main being turned off. In fact, what is proposed is that so long as the mains are full the water direct from them should be made available, while when the supply is shut off the cistern would come into use. But in this case it is obvious that precautions to keep the cistern clean should be just as rigorously observed, and therefore the interior of the cistern should be accessible for the purpose. While the system of cistern storage has met with considerable opposition from many who are adjudged sanitary experts, yet we believe that it is a fact that in very few instances has any serious illness been traced to their employment, in spite of the reports received from time to time of the negligent way they are kept and of the presence of an extraordinary catalogue of objectionable articles which have been found therein. The whole question, it seems to us, may be summed up in a few words. If cisterns are to be abolished then the supply must be absolutely constant. Obviously a constant supply can only be given when the storage capacity of the waterworks is adequate and the distributing services highly efficient. Assuming, however, that the supply can be guaranteed in liberal and unstinted quantities at all times, the question as to whether any occasional emergency necessitating the cutting off the water for a time would make it essential that the cistern or some modification of it should be retained remains to be decided. We are inclined to think that a dual system of service pipes should provide a means out of the difficulty which would be found satisfactory on sanitary grounds and on the ground of plenty.

FROM the earliest times of which we have any certain knowledge it has been customary to assist the formation of a diagnosis in any disease from which a patient was suffering by an inspection of the urine. The variation

which the urine may exhibit are so great and are so obviously more or less in accord with the variations in health that it was only natural that the opinion should arise that these changes were of great diagnostic importance. We find numerous references to this custom, not only in ancient medical works, but even in the dramatic literature of times very near our own. Going back no further than the end of the sixteenth century we find the well-known passage in which SHAKESPEARE makes Sir JOHN FALSTAFF ask his page, "What says the doctor to my water?" And the page replies, "He said, sir, the water itself was a good, healthy water, but for the party that owned it he might have more diseases than he knew for."[1] Of course, SHAKESPEARE was dealing with the time of HENRY IV., but his description is no doubt an accurate picture of his own day. We believe, also, that an early statute of the Royal College of Physicians of London, passed by the influence of LINACRE, was intended to restrain apothecaries from carrying the urine of their patients to a physician for the purpose of obtaining a diagnosis and directions for treatment; and that a little later the Fellow of the College were forbidden to diagnose cases in this way. The practice was known as "water-casting," and is occasionally still to be met with even at the present day in some parts of England, but fortunately only in the hands of unqualified persons. The examination of the urine never extended much further than an inspection, and, in fact, any examination of this secretion could be little less than useless until the progress in the knowledge of the chemistry of the urine made it possible for us to understand something about the causes of the changes in its character.

Gradually knowledge increased; physicians became better acquainted with the normal composition of the urine, and thus were in a better position for recognising the presence of abnormal substances. THOMAS WILLIS discovered sugar in diabetic urine in 1670, and then for the first time diabetes mellitus and diabetes insipidus were distinguished. In 1776 SCHEELE discovered uric acid. The presence of "serum" in urine was noticed even in the eighteenth century by COTUGNO and by CRUIKSHANK; but it was not until 1827 that it was proved by RICHARD BRIGHT that this "coagulable urine" was so frequently associated with disease of the kidney as to render it certain that the two facts were causally connected. It is interesting here to note that, owing to the lack of chemical knowledge at the time, BRIGHT mistook for albumin the deposit of phosphates which so often occurs on heating, and so for a time was inclined to doubt the dependence of albuminuria on kidney disease. It was at one time, and even now is, too often assumed that every deviation from the normal condition of the urine is an indication of renal disease; it is only comparatively recently that diabetes has ceased to be considered a disease of the kidney. On the other hand, the opposite opinion was frequently held that all variations in the urine were traceable to causes other than diseases of the renal organs. Since BRIGHT'S discovery our general chemical knowledge has greatly advanced, and with improved methods and instruments of observation we have arrived at a very full and exact knowledge of the chemistry of the urine in health and of the changes it undergoes in disease. But our knowledge even now is by no means complete; there are still some normal constituents of the urine whose origin is unknown to us, and there are many substances which are abnormally found present whose clinical significance we are utterly unable to estimate. There is another direction also in which we may look for an advance in our knowledge, and a large amount of work has to be done before this question is fully solved. What variations in the urine both in health and disease are associated with the different periods of life? We are only too ready to assume that the human organism works in the same manner and with the same results at all ages. Yet this is not the case and possibly the more we investigate the more we shall find how great the differences are.

In the present number of THE LANCET we print an extremely interesting paper by Dr. FERNANDEZ FIGUEIRA of Rio de Janeiro, in which he deals with the symptomatology of the urine in infancy and childhood, and demonstrates conclusively the importance of possessing a more exact knowledge of the variations in urine depending on age. That a great deal of work has already been done in this matter will be seen by the large number of writers whose opinions Dr. FIGUEIRA has quoted. In the infant and in the child the kidneys are of much greater relative importance than in the adult; this is clearly shown by a comparison of the ratio which the weight of the two kidneys bears to the weight of the whole body in the child and in the adult. In the child at birth the kidneys form more than 1 per cent. of the body weight; the percentage steadily falls as the child grows, and when adult life is reached the percentage has dropped to nearly 0·08; that is to say, weight for weight, the infant at birth has more than ten times the amount of kidney substance possessed by the adult. This preponderance of kidney substance in the young child is to be explained by the rapid and extensive metabolism which takes place at this early age in connexion with the rapid growth then occurring; but it is not simply a matter of the necessity of the excretion of more urea, for though the child at birth takes in twenty-four hours twice as much nitrogen per kilogramme of body-weight as the adult, yet he excretes only one-sixth part, although approximately the same amount of oxygen is absorbed. Many interesting problems are discussed in Dr. FIGUEIRA'S paper, but to only one will we refer, as the actual communication is before our readers. Indican has been often described as a constituent of urine, but its presence in the urine of children was described about six years ago as an important factor in the diagnosis of infantile tuberculosis; it was said to be even pathognomonic. Indican can be easily recognised in the urine by simple tests, and if this view could have been substantiated it would have been of immense importance. The subject has engaged the attention of many workers, but though they are by no means unanimous yet, for the most part they incline to the view that indican represents in the majority of cases merely disturbance of pancreatic

[1] Henry IV., Part 2, Act I., Sc. 2.

digestion, and that it is of no value as an indication of the presence of tubercle, though it certainly does occur in cases where no digestive disturbances can be found.

CAREFUL readers of the evidence published by the Lords' Committee on the subject of the Infant Life Protection Bill will conclude that this is one of those cases in which there is a real danger that zeal may run away from discretion. The object aimed at by the promoters of the Bill is undeniably, and even eminently, an excellent one, and one which will command the sympathy of all humane persons. That children who are put out to nurse, especially when they are illegitimate children whom force of circumstances makes a grievous burden to their natural protectors, are exposed to much privation and are often the victims of more or less deliberate cruelty has been superabundantly proved both in the police-courts and the committee-room. And even without the proof it might be taken for granted, for they make their appearance amid circumstances of misery such as only too surely blunt the feelings and brutalise the manners of those with whom they come into the closest contact.

But the evidence given before the Lords' Committee goes far to show that these adverse influences work less mischief than might easily be supposed. Thus several ladies engaged in that particular branch of philanthropy which is technically called "rescue work" spoke from their experience of foster-parents as a class and also of the unfortunate mothers whose untimely offspring furnish for the most part the hapless children whose welfare is the object which the promoters of the Bill have at heart. With practical unanimity they declared that, as a rule, foster-mothers are very kind to their little charges, and that when they err in their treatment of them it is generally through ignorance. And concerning the natural mothers, one of them, who spoke with all the authority of a seventeen years' experience, declared that towards the support of the child they contribute very willingly according to their means, and that cases of desertion are very few. No doubt evidence of a kind was produced to the contrary effect. The evidence of Mr. BRAXTON HICKS, the coroner, for example, could be interpreted to mean that the intentional destruction of nursed children by the administration of an unsuitable diet was an every-day occurrence. We are sure that this sound and energetic president of a court in which the details of sordid domestic drama are but too often the staple sensation did not intend to bring so wholesale an accusation. Again, Mr. BENJAMIN WAUGH talked of "baby-farming" a million children a year—meaning thereby destroying them—as if that figure of speech could convey a just impression of the danger to be contemplated. The evidence of those witnesses who spoke under a fuller sense of responsibility than did Mr. BENJAMIN WAUGH and with knowledge of the facts derived from experience was that as a rule children put out to nurse get much the same treatment as children living with their parents in the same social stratum and that, although privation due in part to extreme poverty and in part to gross ignorance is a very common lot, it is not in any noticeable degree the lot of the nursling rather than of the home-bred child. Here precisely is the real root of the difficulty. It is idle to deny the fact stated by Mrs. CROWDER in her evidence before the Committee that "there are a great many homes in St. George's where the treatment of the children would not pass any inspector," and what is true of St. George's is also true of every place in the kingdom. It would be impossible for any registering and supervising authority to approve of the conditions under which a very large proportion of the children of the land, and especially the poor children, are brought up. But it does not follow that general supervision by local authorities would serve any useful purpose; and what is obvious at a glance in the case of home-bred children becomes pretty clear upon the evidence with respect to nurse children also.

It is not a little remarkable that even the advocates of legislation upon the lines of the two Bills under discussion, whenever they are actually engaged in the work of boarding out children, deprecate any interference by registration or otherwise with the particular foster-parents whom they employ, and they show very good rerson for their exceptions. They all substantially agree with Mr. BARNARDO that disciplinary registration would "deter the best class of foster-parents from assuming that position." Indeed, the only witnesses who succeeded in shutting their eyes to this fairly obvious conclusion were officials whose experience has not brought them much into contact with the unregistered foster-mother. Although the evidence does not tend to simplify the problem of protecting infants against their protectors it certainly goes to show that the evil to be guarded against has been exaggerated—a natural consequence probably of the horror aroused by the discovery and public disclosure of one or two sensational crimes—and that a large amount of good work is being accomplished by voluntary charity in directions which hold out no prospect of successful enterprise to the police or local authorities and but small opening for remedial legislation.

THE testimonial craze is assuming almost as large proportions as the art of puffing. We do not refer to those marks of esteem which are got up for gentlemen of the liberal professions when resigning important posts, nor to the "devoteapot" and the set of robes which are presented to clerics called to a wider sphere of duty. Neither do we refer to the documents given to worthy young men by teachers in medical schools. In none of these forms of testimonial is there any harm, though the universality in the bestowal of the former and the high level of eulogy employed in the phraseology of the latter have of late tended to cheapen the kindly actions. The testimonials with which we are at present concerned are those given probably out of sheer good nature and often in ignorance as to the use which will be made of them to the manufacturers of various medicaments, foods, babies' bottles, soaps, and a variety of other articles. Never perhaps has there been such a tendency on the part of the public to drug themselves as at the present time, and the means for so doing are widely spread and obtainable by anybody. A new hypnotic is invented about once a week and is always far superior to anything that has gone before. All kinds of drugs are put up in the form of wines, foods, sweetmeats,

and fondants, and flaming advertisements are exhibited with a facsimile letter dated from the palace of PRESTER JOHN or some equally notable monarch setting forth the virtues of ——'s Elixir. Other remedies appeal to the domestic affections by badly-printed little books containing harrowing stories of middle-class life, all owing to some complaint which can be and has been cured by a nostrum handed down in one family since the days of NOAH. These latter cures are generally attested by a "minister," which at once throws a halo of certainty round the story. These, however, are advertisers who have no faith in medical men—at least, the heroes and heroines of the stories have always been given up by "the doctor," but occasionally the advertiser appends a testimonial signed by the name of some eminent medical man, who generally turns out on inquiry to have said nothing of the sort. Concerning this sort of testimonial we wish to say a few words.

Appeals of this kind are drawn up for the eyes of the people at large. It is a well-known fact in psychology that if only a statement is made often enough a number of persons will believe it. And as, to quote Mr. PUFF, "the number of those who undergo the fatigue of judging for themselves is very small indeed" the gains of the advertisers grow with marvellous rapidity. Sometimes a pretence is made of appearing to appeal to a narrower circle. Pamphlets are distributed among the medical profession extolling the virtues of some drug or combination of drugs or some food preparation. Accompanying these are innumerable testimonials purporting to come from various medical men, names and addresses being given in full. Now, we have nothing to do with the customs obtaining in other countries, but we do not think it right for any medical man in this country to give testimonials which are used in a purely commercial manner as to the value of a drug which in the majority of instances they have assuredly not tested in more than a dozen cases. But though, of course, if a man is weak enough to write about a drug, and sign his opinion and hand it over to the proprietors without saying how his notice shall or shall not be used, the said proprietors have a legal right to use it, the case stands on a different footing when they deliberately make use of a man's name and append it to words which he never has used. Such an instance has lately been brought to our notice, and the disclaimer of the gentleman in question will be found in another column. Not only has he been made to cry up the virtues of a drug which he has never tried, but he is made to do so in the most offensive manner. Imagine an educated man writing such drivel as this: "Hurrah for Sanmetto. My results from its use in bladder cases astonished my *confrères*. In gonorrhœa its effect is nothing short of magical." Yet these are the words that are put into the mouth of Dr. W. B. RANSOM in a pamphlet puffing "a scientific blending of true santal and saw palmetto," which stuff Dr. RANSOM has neither used nor commended.

To employ a man's name unjustifiably is a way of blackening his character, and to keep his name unstained is the pride and labour of every honourable man. We have no hesitation in saying that the dissemination of such a testimonial to a quack nostrum as the one we have just quoted would certainly lower Dr. RANSOM in the esteem of those who did not know him, albeit those who did know him would detect the forgery. And when we consider what Dr. RANSOM's remedy is we perceive the great cruelty of his position. The pamphlet in question appears to be published in New York. If Dr. RANSOM could find a defendant here to proceed against he would inevitably succeed in obtaining redress, but although a similar remedy may be his in the New York courts the necessary legal steps would be troublesome and expensive. The Medical Defence Union has the case in hand, we understand, and may be trusted to do all that is possible.

Annotations.

"Ne quid nimis."

THE ARMY MEDICAL SERVICE.

THE result of the last competitive examination for the Army Medical Staff cannot be regarded as satisfactory to the military and War Office authorities. We have so frequently referred to the subject of the unpopularity of the service that there remains nothing fresh to be said about it. There is evidently a widely prevalent feeling that a medical officer's position in the army is not what it should be, and the treatment accorded to them in the matter of election at the Service clubs tends to prove that a spirit of antagonism to them exists. An overwhelming majority of medical officers desire to have their service converted into a Royal Medical Staff Corps and placed on a footing in this respect with those of the Royal Engineers or Royal Artillery, and they cannot see why this should not be done. Moreover, the medical staff are discontented because of the shortness of their home service as compared with the length of their service in India and abroad, their frequent moves, and the small amount of leave they get for the purposes of study or relaxation as compared with other officers. Medical officers contend that the Service is for them an uncomfortable and harrassing one, and, in the language of the day, that "it is not good enough." It is not a question of pay or pension, but of position and adequate recognition of their work and responsibilities, and they regard the utterances of distinguished military officers about their pluck or heroism in the field as quite beside the mark. They want to know whether the views of these gentlemen have been formulated and represented by some one in authority acquainted with all the facts, and what is going to be done.

SUPERANNUATION: TIMELY OR PREMATURE?

DR. BACCELLI's successor in the Ministry of Public Instruction is contemplating, so say the Italian official organs, the introduction of fresh blood into the academic professoriate, a step which implies the relegation to the retired list of not a few holders of university chairs. The news has come like a bombshell on the thirty seats of learning throughout the kingdom, filling their septagenarian, or even sexagenarian, professors with dismay, and the *privat docents* and assistant lecturers with fond expectancy. Some such reform, as a first step towards bringing the Italian schools into line with their less mediæval sisters this side of the Alps, has long been demanded by Italy's most enlightened sons, but vested interests and the reluctance of "the man in possession" to resign in a country where living is hard and old-age pensions small, explain the obstacles hitherto thwarting it. Signor Gianturco (the present Minister of Public

Instruction) has already counted the cost of his proposed innovation; nay, he is even credited with the design of applying an age-limit to the services of all schoolmasters and teachers, male and female, such as has already, in fact, been imposed on officers in the army and navy. The passage of his Bill through Parliament will be worth watching, as the discussions it must evoke will have an interest far beyond the young kingdom to which it is meant to apply. There is not, indeed, a first-class European power which is not confronted in one form or another with the question of superannuation or age-limit in its public service—not one in which the problem of where to fix that limit is not fraught with difficulty, only to be solved by the creation of many "hard cases." To take one out of many considerations which meet us on the threshold, is it not the fact that the mean duration of human life and with it the healthy use of the faculties is extending? In France, for example, the "Annuaire du Bureau des Longitudes" in 1853 fixed that duration at thirty-six years and four-tenths — a notable advance on that given by Duvillard's table half-a-century before, according to which the mean duration was twenty-eight years three-fourths. Again, is it fair to draw a line by which, say, at sixty years all holders of university chairs must retire, when many a man in that position is really younger at sixty-five than his would-be successor is at fifty? There are, moreover, departments of academic study in which personal familiarity with its problems—"the years that bring the philosophic mind" when "old experience doth attain to something of prophetic strain," as Milton puts it—are of more value in the teachers than the vivacity and energy of youth. But the qualities of superior worth would often by an arbitrary age limit be sacrificed to the inferior and the student be placed at a corresponding disadvantage. Medicine, particularly, as a branch of applied science, would suffer by the removal from its teaching force of the old and experienced to make way for the young and tentative, and however it might gain in what is popularly called "go" it would lose in the soberer and more circumspect qualities which inspire caution and with it public confidence. At the same time, it would be absurd to contend that all old age is cautious and philosophical and that all youth is enthusiastic and prematurely dogmatic. The former may be chiefly characterised by torpor, and the latter may exemplify an "old head on young shoulders." In Universities north of the Tweed and elsewhere professors have been known to stick to their posts long after they were unfit for duty, converting their chairs, as it has been pointedly expressed, into "the dormitories of official incompetence." The question recurs, Is it possible by an arbitrary age limit to exclude the senile laggard and to secure the young proficient? However much in Italy, with her backward systems and her low standards of pass-examinations, this question cries aloud for practical solution, here in the British Isles our "use and wont," though not ideally perfect, has hitherto worked well, so that, in answer to the call for innovation on academic traditions we may (in the meantime at least) pursue a Fabian policy and reply with Lord Melbourne: "Can't you let it alone."

THE UNQUALIFIED PRACTITIONER AGAIN.

A DECISION was recently given by the Leeds stipendiary magistrate which emphasises the manner in which members of our profession who have spent both time and money in acquiring knowledge are handicapped by the competition of those who have not. Thomas Ison was prosecuted by the Medical Defence Union upon two counts: (1) that he used titles implying that he was registered under the Medical Act; and (2) that he unlawfully pretended to be a surgeon. The stipendiary magistrate dismissed the first charge because, said he, "the use of the terms 'oculist and aurist' does not warrant an inference that the defendant is recognised by law as a medical practitioner." On the second count the defendant had advertised his establishment as "The Leeds Eye and Ear Dispensary," and this, said the stipendiary magistrate, would certainly give anyone the idea that the defendant was a qualified practitioner. With regard to the first charge, the stipendiary magistrate seems to have based his opinion upon the evidence of a witness who said that he never knew a qualified medical practitioner describe himself as an oculist and aurist, and he further deposed that these terms were generally used by persons whom he called "quacks." Eventually the defendant was fined £5. The stipendiary magistrate remarked that even if a monopoly of treatment were conferred on practitioners it would not safeguard the public, for any registered practitioner might perform operations affecting sight and hearing without having any special knowledge of the subject. Of course he could, and so he can now, only as a matter of fact he does not; and as a further matter of fact the stipendiary magistrate is not to be commended in that he practically pointed out to the defendant the manner in which he might advertise himself and his work without danger of coming within the meshes of the law in the future, oblivious of the contingency that when the present circumstances have been forgotten Thomas Ison may take advantage of the information. The recommendation of the Committee on Food Adulteration that magistrates should have power to order convicted defendants to publish a record of their convictions might well be applied to other forms of deceit.

CYST OF THE BRAIN.

IN the *Medical News* (New York) for Aug. 1st Dr. Eskridge and Dr. Clayton Parkhill report at considerable length a most interesting case of cyst of the brain situated in the foot of the left second frontal convolution. When first examined, in April, 1895, the gait was perfect, there was no ataxia and no paresis of any of the muscles. The knee-jerks were a little lessened. A fine tremor at times was observed in both arms. The chief interest of the case lay in the character of the speech and, more particularly, of the writing. The receptive centres concerned in speech seemed to act normally, but the patient's speech was slow and he occasionally hesitated in pronouncing long words. If he made a mistake he at once recognised it and usually corrected it. For about eighteen months he had shown some difficulty in writing, which seemed to be due to inability to arrange the letters so that they would appear in the regular order in which common usage has assigned them At the same time he omitted letters and substituted others. It would appear that his defect of speech was an inability to spell rather than an inability to write, as he could copy both printing and writing with scarcely a mistake. He copied much more rapidly than he could write voluntarily, except when the words were spelt for him. If a word was spelt for him he wrote it readily and correctly. Further, he formed his letters well, except when he was suffering severely from headache or from other causes. An operation was performed on Dec. 5th and revealed a cyst situated as already described. He improved rapidly after the immediate effects of this operation had passed away and continued well until Feb. 1st, 1896, when he injured his head by striking the unprotected brain against the sharp corner of a box. Then all the symptoms of compression of the brain from meningeal hæmorrhage became apparent. A second operation was performed on Feb. 13th and a membranous-like substance was found under the dura mater which proved to be formed of inflammatory lymph. After

recovery from the operation he could articulate quite distinctly, but he could read nothing except what was written and printed in very large letters, as his vision was poor. In reading he would still transpose and substitute, and not infrequently omit, words. He could write voluntarily, but transposed, omitted, and added letters, so it was not easy to make much sense of what he had written; but he copied quite well and could write correctly if the words were spelt slowly for him. Copies of his writing accompany the paper and form an interesting addition to our knowledge of the "graphic centre," which has been supposed by some to be located in the foot of the second frontal convolution.

THE GLOUCESTER EPIDEMIC.

IN view of the efforts which are being made by the opponents of vaccination to explain away and misrepresent the facts of the recent epidemic of small-pox in Gloucester, and of the desirability of counteracting statements in this direction as well as misrepresentations of the force of the recommendations of the Royal Commission as promptly as possible, the honorary secretary of the Jenner Society, Gloucester, will be glad to receive and deal with any newspaper cuttings which may be forwarded to him by medical men and also to give them personally any information or assistance to enable them to meet such mis-statements on their own account. A copy of the report of the Vaccination Committee of the Gloucester Board of Guardians will be sent to any medical man who will communicate with the Secretary of the Society (Dr. Bond, Gloucester).

POISONOUS BERRIES.

AN inquest was held by Dr. Oswald on Friday, Aug. 21st, which presented features of some interest. It was shown in evidence that on Tuesday, the 18th, the deceased (a boy aged seven years) had eaten some berries in company with other children. On the following morning he was taken ill with vomiting and pain in the abdomen, which was slight. There was no diarrhœa. He became drowsy and somewhat "light-headed." The pupils were slightly dilated. He continued in this condition until the following morning, when he died. At the necropsy the stomach was found inflamed at the cardiac end, as was also the duodenum. No seeds were found in the stomach or intestine. All the organs, including the brain, were congested. The nature of the berries could not be ascertained. Some were shown in court, but were not recognised by any present, although several medical men happened to be in attendance. Questions were naturally asked as to whether any of the other children who were stated to have eaten the berries had been ill, but no information on this point could be obtained. It is to be hoped that further investigation as to the nature of the berries will be made so as to prevent in future such occurrences as children partaking of poisonous substances thus inadvertently placed in their way.

HEAVY DAMAGES FOR SEWER POISONING.

THE substantial damages of £3500 granted at the Birmingham Summer Assizes against the King's Norton Rural District Council for maintaining a ventilating shaft in a chimney of a house belonging to a gentleman whose death was alleged to have been brought about in consequence, will serve to indicate anew the responsibility attaching to sanitary authorities in the matter of sewer ventilation. When the position of the deceased is remembered the damages cannot be regarded as large, but judged by their mere amount they must be looked upon as giving importance to the case, which will be known as that of the executors of the late Thomas Henry Smith *v.* the King's Norton Rural District Council. We do not propose here to discuss all the details as to the construction of this sewer shaft inside a chimney of a private house or the question as to negligence in allowing it to get into bad order; those points were fully heard before Mr. Justice Collins. But we may call attention to the fact that every principle of modern sanitation as regards house drains is based upon the assumption that the air from the public sewers is not to be allowed to enter private premises. For this reason a trap is always placed on the sewer side of a fresh air inlet in the house drain, and even the properly ventilated house drain is not allowed to have a ventilating shaft placed any where about a house where drain-air can enter the building. A chimney is the last place that should be so utilised. Again and again has such a ventilator placed outside a chimney, in which there is a down draught, led to the carrying of drain-air down the chimney into bedrooms and other apartments and to the production of disease. But, if the case in question is correctly reported, it was concerned not with a shaft from a house-drain merely, but with one conveying the sewer-air from a public sewer. The danger in such a case is obviously intensified; for no householder can know when such sewer-air may not be conveying on to his premises the specifically poisoned air from disease elsewhere. In this respect we trust the case will be a warning both to householders and to sanitary authorities.

TREATMENT OF BACTERIURIA BY INTERNAL DRUGS.

IN a paper in the recently issued fourth volume of the Edinburgh Hospital Reports Dr. Lowell Gulland has an important and suggestive paper on this subject. Organisms, he says, may make their way into the normally aseptic parts of the urinary apparatus in four different ways: (1) by spontaneous growth from the urethra into the bladder; (2) by instrumental introduction; (3) by the bursting of an abscess into the urinary tract—e.g., from parametritis or appendicitis; (4) by transmission through unbroken tissue from elsewhere—e.g., the rectum; and (5) by passage through the kidney from the blood. Only a few organisms have been proved to appear in the urine in this way. Although the urine forms an almost ideal culture medium no organism will remain in permanent possession of the urinary tract unless it is pathogenic or unless there is retention of urine. Any organism will probably cause a certain amount of damage to the mucous membrane, and its primary development will thus be favoured; but as the epithelium recovers the rate of removal of the organism will exceed the rate of growth and the organism will at last be eliminated. Cystitis is by far the most common inflammation of the urinary tract. The ammoniacal fermentation of the urine, formerly thought to be invariable in cystitis, is only occasionally present, and, as a matter of fact, the urine in cystitis is frequently acid. In reference to treatment, when the acute symptoms of the attack have subsided and the mucous membrane has recovered to a certain extent, there is still over the whole or part of its surface a layer of adhesive muco-pus swarming with organisms. In this condition washing out of the bladder is often most efficacious, but in certain cases it is inadmissible, and recourse must then be had to administration of remedies by the mouth. Drugs to render the urine acid if it is alkaline are, of course, useful. Various germicidal remedies have also been recommended, but all of them, Dr. Gulland shows, are excreted in a form in which their germicide value is small. He suggests, however, that although they do not destroy the vitality of the organisms they may have an effect upon their virulence either by preventing the secretion of their toxic products or by neutralising these when formed. Such a view is, of course, extremely difficult to put to the test of

experiment. However they may act, certain drugs do undoubted good in cases of cystitis. In the first place Dr. Gulland places salol; this renders the urine acid, both its constituents are excreted in what is possibly an antitoxic form, it produces no gastric irritation, and with reasonable care there is no danger of carbolic acid poisoning. All the other drugs in common use for this purpose have the great disadvantage of causing, sooner or later, some—it may be severe—gastric irritation. In conclusion, Dr. Gulland remarks that it is idle to expect any real antiseptic action until some strongly antiseptic substance is found which can be taken in large quantities, which has no irritating effect on the stomach or kidneys, and which is excreted by the urine in a form as antiseptic as that in which it is ingested. The paper is an extremely interesting one, but it seems to us that its obvious moral is that in every case of cystitis washing out should, unless there are any distinct contra-indications, be assiduously employed.

"THE UNRECOGNISED CONSULTANT."

UNDER the above heading an American contemporary pays a just tribute to the work of the pathologist and of the bacteriologist, who, it considers, should be recognised as consultants of a high order. There is no need to point out in how many instances the whole future treatment and well-being of a patient may be influenced by an expert opinion as to the presence or absence of tubercle bacilli in sputum or the nature of a morbid growth. While the practitioner, general or consultant, should have sufficient knowledge of these subjects to use them in his daily work, he may have neither the time nor conveniences, nor perhaps the experience, for carrying out the requisite examinations, which must, of necessity in the majority of instances, be handed over to one who has devoted himself to such work. The clinician must constantly make use of the results obtained by the scientific worker, for whose opinion—on which so much depends—some adequate return ought to be made. Yet how often does the successful consultant, while himself receiving a handsome reward for his services, ask a junior colleague or friend to "just examine this for me and let me know what you think of it," without ever dreaming of offering a fee for the opinion, which may have been arrived at only after a considerable expenditure of time and trouble.

THE DANGERS OF ICE-CREAM.

THE fatality at Bradford, caused through an indulgence in ice-cream of the cheaper kind, has drawn the attention of inspectors under the Food and Drugs Act to that article; and a sample taken by Inspector Tyler, one of the officials under the Middlesex county council, recently, on analysis, disclosed the presence of zinc—a matter injurious to health. The vendor, Isaac Brooks, an itinerant ice-cream seller, was accordingly summoned before the Brentford justices last Saturday. He pleaded ignorance of the presence of the dangerous matter, but the certificate of Mr. Bevan (the county analyst) showed that the sample contained 0·01 per cent. of zinc, which was equivalent to $\frac{7}{10}$ths of a grain in the pound. Inspector Tyler told the justices he had made inquiries of the trade, and probably the adulteration arose through the spoon used in serving out the ice cream scraping off portions of the zinc pail. Questioned by one of the justices, he said the zinc pail became oxidized, and portions could be drawn off by the spoon; if not oxidized the reverse would be the case He found nothing injurious in the colouring matter. He had consulted the medical officer of health of the district, who assured him that there would be no danger to life from the presence of such a small quantity of zinc. The defendant stated that some of the acids used in the preparation of the cream played upon the zinc, and when he cut round the top of the pail or in the process of twirling it round, the zinc must have come off. The inspector referred to the Bradford case as having called his attention to ice-cream, but in that case the medical evidence and the finding of the jury were that the ice was sour through having been kept. The Chairman of the Bench said that the inspector was quite right in bringing the case before the court. The defendant must use every care in the preparation of the cream, and be careful of the operation of the acids. He would only have to pay the costs of the summons.

THE PATHOLOGY OF TRACHOMA.

PROFESSOR GUARNIERI of the University of Pisa has published in the July number of the *Clinica Moderna* of Florence a preliminary account of his researches into the pathogenesis of trachoma. In fourteen hospital patients he has found in the detritus obtained by energetic "raclage" of the trachoma granulations some very small round bodies capable of being intensely stained, preferably with a 2 per cent. solution of magenta-red in water. They can then be recognised with a magnifying power of only ninety diameters, although they are so small that the diameter of some is between a third and a half of that of a red blood-corpuscle. Professor Guarnieri is inclined to suspect that they are of a parasitic nature and belong to the class of blastomycetes, but he has not yet succeeded in cultivating them, and is still pursuing the investigation.

BIRTHS, DEATHS, AND MARRIAGES IN SOUTH AUSTRALIA.

WE have received the annual report for 1895 of the Registrar General of births, deaths, and marriages in South Australia. The increase of population for the year was 4933 a lower increase than in any year since 1890. The births registered in 1895 were 10,537 being an increase of 61 over 1894, while the illegitimate births were 330, a percentage on the total births registered of 3·13. A table is given showing the percentage of illegitimacy in the other Australian colonies and the British Islands for the last seven years. South Australia comes out with a mean of 2·84 being, with the honourable exception of Ireland 2·67, the best of any. England and Wales stand at 4·32 and Scotland 7·50. The deaths numbered 3,921, being fewer by 80 than in 1894. There were 71 from enteric fever, being 0·20 per 1000, as against 0·23 in 1894. The rate in England for 1894 was 0·16. Phthisis caused 335 deaths, a rate per 1000 of 0·96, as against 1·04 in 1894; whilst the proportion for England in 1894 was 1·39, the lowest ever recorded. Of infants under one year there died 1000, being a rate of 9·49 to every 100 births. The English rate for the five years ending with 1894 was 14·88, so that South Australia compares very favourably in this respect with the mother country. Marriages were 2,048, the lowest number in any year since 1887.

THE HEALTH OF THE ARMY IN INDIA.

WE have frequently called attention to the amount of venereal disease in the European force in India. The figures are appalling and everybody feels that something should be done. The action of a number of faddists has, in our opinion, been productive of a vast amount of mischief—physically, socially, and morally—and we are extremely glad that an inquiry has been promised by the Government into the subject. It has been alleged by persons who have no sympathy whatever with this fanatical section of the community that the Lock Hospital system in India had nevertheless proved a failure, and that a return to that system cannot, therefore, be recommended as likely to prove an adequate and efficacious measure. Taking the Lock Hospital

system as it existed and as it was worked in the past there can be no doubt that the results were disappointing, but we do not at all argue from that that it should be abolished; on the contrary, the whole system should be amended and reconstructed and a new machinery introduced with the view of seeing whether something far more efficacious cannot be designed. Of course, in a vast country like that of India, with large opportunities for clandestine prostitution and a native police system, the subject is confessedly a difficult one, but it must be faced. What is wanted is to see if some new, simple, and practical plan cannot be designed to cope with the evil. As we have said, all other countries have adopted such measures with a large amount of success. Why should not we make the attempt to grapple with an evil of such grave and increasing magnitude?

PLUCK.

AN instance of pluck and presence of mind which came under our notice recently ought not, we think, to pass unmentioned. On Sept. 7th an artillery waggon with a pair of powerful horses was being driven by an artillery driver through Knightsbridge. Near the top of Sloane-street the horses became frightened and started off at a gallop. The driver was able to guide them more or less, but not to stop them. Accordingly they came up the hill at full speed, and fortunately there was not much traffic. On reaching the bottom of Hamilton-place the driver steered with great nicety for a lamp-post, which he just managed to hit with the pole-chain attached to the near side horse. This, of course, gave slightly and at the same time stopped the horses effectually. Neither of them was hurt apparently, and the driver got down perfectly calm. Whether the horse will develop any degenerative spinal changes from the jerk will be an interesting veterinary point, but we only wish to call attention to an interesting exhibition of skill and judgment under very trying circumstances.

CROSS LIGHTING.

SOME traditions die hard, being accepted without examination by nine persons out of ten and by all who are in or under authority and, like officials generally, opposed to, or suspicious of, innovation. Among these is the belief in the hurtfulness of cross lighting. This method of lighting would seem only to be held injurious in schools, for in our own houses we are only too pleased if we can have windows on two or more sides of a room. Even in Germany, where statistics and experimental investigation pervade every department of administration, and where in each detail the executive is guided by an order in council somewhat inappropriately called an "Erlass," we find cross or double lighting still expressly condemned. Yet Cohn and Förster, Javal and Ferrand, Rumbold and a Royal Commission on School Construction have urged the groundless nature of the prejudice. Provided always that the eyes are not dazzled and that no shadow falls on the reading or writing, it is impossible to have too much diffused daylight or its artificial equivalent. The loss of intensity with increasing obliquity of the rays of light is acutely felt in wide rooms, especially when not high in proportion, on the side opposite the windows; whereas if there be windows or lights on each side the intensity of illumination is equalised and its total amount doubled. It is only necessary that that coming from the right should be naturally or artificially the weaker, as by having the windows north and south or by filling those on the right with clouded glass. Windows in front are always objectionable, but light from behind, if not so strong as to cast a shadow, can but serve to increase the illumination derived from the proper quarter. As Cohn and Förster long since pointed out, reading or other work demanding clear but effortless vision is in the open air when the sky is overcast a real luxury. Under these circumstances the light is ample but shadowless; it comes from everywhere, but from no one quarter more than from another. The most perfect artificial illumination conceivable is that obtained by Hrabowski's arrangement of hemispherical milk glass reflectors with prisms and mirrors by which the light of an electric arc lamp is diffused equally throughout the building, though the source is hidden from view. The light is photometrically equal to that of a clear summer day and as free from colour; it is almost shadowless and is, in fact, superior to daylight in not being liable to fluctuations, although its intensity can be regulated at will.

THE TEMPERATURE RELATIONS IN APOPLEXY.

DR. DANA writes on this subject in the *Post Graduate*, and states that in cases of cerebral hæmorrhage accompanied by hemiplegia the temperature of the paralysed side is higher than that of the sound side, and that in acute cerebral softening from thrombosis or embolism this difference in temperature is not present. This the author says will be found a valuable means of distinguishing between the two conditions, and he quotes in this article four cases all proved by necropsy. The difference in temperature between the two sides in these cases was usually from half to one degree. Dr. Dana acknowledges that there are no doubt many exceptions to this rule as there are to most others, but they are rare, and are to be explained either on the ground that the hæmorrhage is very small or the acute softening is very extensive It is possible, too, that certain peculiar localisations of hæmorrhages and softenings modify the symptom, but for the enormous majority of cases the fact holds good. No perceptible disturbance of temperature was ever found in hemiplegia due to embolism, no matter how pronounced and severe the central disturbance was. On the other hand, in thrombosis, especially when occurring in old people with badly diseased arteries and a tendency to extension of the softening, there is rather more apt to be a disturbance of temperature whether the trouble be hæmorrhagic or thrombotic, but the tendency is much greater with the hæmorrhage.

THE ABOLITION OF QUARANTINE

UNDER the title of "Public Health Act, 1896," we have this year done away with the last vestige of quarantine in the United Kingdom. The full title of the Act is: An Act to make further Provision with respect to Epidemic, Endemic, and Infectious Diseases and to Repeal the Acts relating to Quarantine. The principal section of the Act is the first one, in which power is granted to the Local Government Board to make regulations, just as they have already done for the purposes of cholera, as to the hoisting of signals by vessels having any case of infectious disease on board; as to the questions to be answered by masters, pilots, and others; as to the detention of vessels and persons infected; and as to the duties of certain individuals under the regulations. The term "epidemic, endemic, or infectious disease" naturally includes yellow fever and plague, the only two diseases as to which quarantine was carried out, and since all the quarantine Acts mentioned in a schedule are repealed, the only method of dealing with these two quarantinable diseases will in the future be that which has now been adopted for many years as regards cholera. In Scotland and in Ireland the Local Government Boards of those portions of the kingdom acquire similar powers, and it may be assumed that the regulations made in the three portions of the United Kingdom will be alike in all essential respects. The Act comes into operation on Nov. 7th of this year, and by that time new regulations will doubtless have been issued to give effect to its provisions. It is to be hoped that our colonies, and

above all our Crown colonies, will be led before long to act on the same principles as those which have been so successfully carried out in the mother country.

THE VACCINATION QUESTION.

THE premature publication of unrevised proofs of certain portions of the Report of the Royal Commission on Vaccination is already causing trouble to guardians and to magistrates. At Edmonton where it had been decided to enforce the law there is again hesitation, owing to the knowledge that there is certain to be a recommendation which will aim at affording relief to the so-called "conscientious" objectors to vaccination. So, also, at Ipswich the magistrates have adjourned a batch of cases for six months. For the guidance of guardians and magistrates we would recall the fact that no report of the Royal Commission has yet been issued, and that it is quite impossible for any Government department to take cognisance of any surreptitious report, however correct or incorrect it may turn out to be. Besides which, if the portions of the Report quoted are correct, compliance with the recommendations and suggestions of the Commission would involve the repeal of nearly the whole of our present vaccination law and the preparation of a new law to be submitted to Parliament. Many months must be involved even in the preparatory work which, as regards lymph-supply alone, will probably involve an entirely new organisation; and even then an Act to give effect to the new scheme will have to be passed into law. The earliest time for any altered action must therefore be after the termination of the Parliamentary session of 1897, and until then the law remains absolutely unchanged. We refer to this because some persons are imagining that a mere report of a Commission creates a change in the law.

THE BRITISH ASSOCIATION: THE NEW SECTION OF PHYSIOLOGY.

AMONG the features of the annual meeting of the British Association, to open in Liverpool next Wednesday, which will be of special interest to a medical audience will be the meetings of the recently constituted "Section of Physiology." The President of the section, Dr. Gaskell, F.R.S., of Professor Foster's Laboratory at Cambridge, will address a combined sitting of the Sections of Physiology and Zoology, taking as his subject his theory of the "Ancestry of Vertebrates." Dr. Gaskell maintains a thesis of the lineal descent of vertebrata from the arthropoda. At present his view possesses few adherents among morphological specialists. It is expected that much interest will be exhibited in his address. Besides the above, numerous other communications of more purely physiological interest will be forthcoming at the section; among these may be mentioned those of Professor McKendrick, F.R.S. (Glasgow), on Further Researches with the Phonograph; Professor Bohr (Copenhagen) on Respiration in Birds; Professor Wesbrook (Toronto) and Professor Lorrain Smith (Belfast) on Experiments on Fever; Dr. Pavy, F.R.S. (London), on the Constitution of Proteids; Dr. Dupuy (Paris) on Cerebral Localisation; Professor MacAllum (Toronto) on Organic Compounds of Iron in the Tissues; Professor Haycraft (Cardiff) on Photometry; and Professor Thompson (Belfast) on Peptones. Communications have also been arranged for from Professor Waymouth Reid (Dundee), Professor Minot (Baltimore), Professor Sanderson, F.R.S. (Oxford), Dr. Monckton Copeman (London), Professor Charles Richet (Paris), Dr. Gustav Mann (Oxford), Professor Boyce (Liverpool), Professor Hendman, F.R.S. (Liverpool), Dr. Grünbaum (London), Dr. Noel Paton (Edinburgh), Professor Sherrington, F.R.S. (Liverpool), Professor Augustus Waller, F.R.S. (London), Dr. Stevenson (Liverpool), Professor Rose Bradford, F.R.S. (London), and others. The meetings of the section will be held at the University College, Brownlow Hill.

THE INTERNATIONAL MEDICAL CONGRESS, 1897 MOSCOW.

WE have received the following letter from a valued Irish correspondent:—"In your issue of Aug. 29th is published a list of names of medical men who were elected at a recent meeting of the International Medical Congress held in Moscow as members of the National Committee for Ireland. The constitution of this committee has given great dissatisfaction in Ireland. In this list of representative (?) medical men there is not a single Dublin obstetrician; and while ophthalmology is represented, that department in which the capital of Ireland has always been specially pre-eminent, and at no period more so than at present—I mean obstetrics—is totally effaced. Further, to call a committee in which out of a total of fourteen names nine are connected with Dublin a National Committee for Ireland is peculiarly Hibernian." It seems to us that our correspondent's complaint is much to the point, and we hope that if not too late it will be brought to the notice of those in authority. The selection of committees for these international functions is not a grateful task. A certain amount of friction and heartburning is often caused, and when this is purely the result of misplaced estimation of individual importance it meets with no sympathy from us. But in this case the committee would really seem capable of addition to the advantage of the medical status of the country whom it is to represent. The names selected are among the most important in the country but it cannot be denied that when Dublin claims so large a proportion of them it is curious that no Dublin obstetrician is included in the list.

WE are frequently requested by practitioners, sometimes by young men commencing their careers, at others by men of experience whose health will not allow them to resist the rigours of our climate, to recommend some quarter of the globe where an opportunity is offered of making a livelihood. We continue this week the information gathered from our special correspondents in different parts of the world concerning the position of the British practitioner abroad. Our information is not exhaustive and does not cover the whole globe, but the places concerning which the medical man generally desires information, and in which he may hope to find a *clientèle* of his own nationality, will all be dealt with.

THE forty-first annual exhibition of the Royal Photographic Society is now in course of preparation and will open to the public on Monday, Sept. 28th. On the Saturday previous there will be a private view, followed in the evening by a conversazione, at which the President, Captain W. de W. Abney, C B., D.C.L., F.R.S., and Council, will receive the fellows, members, and their friends. Exhibits have to be delivered at the society's offices at 12, Hanover-square, W., not later than 9 P.M., on the 10th inst. The exhibition will be open daily from 10 to 5, and on Monday, Wednesday, and Saturday evenings (when lantern slides will be shown) from 7 to 10, and will close on Nov. 12th.

IT will be seen by a letter from Dr. James Holmes, hon. sec. to the Manchester Medico-Ethical Association, which we publish in another column, that seven gentlemen have intimated their intention of addressing the profession of the Manchester District on Thursday next, in the character of candidates for the post of Direct Representative on the General Medical Council.

THE LEGALITY OF BRITISH QUALIFICATIONS ABROAD.

(Continued from p. 668.)

FRANCE.

No one—native or foreign—can practise on French territory unless he be provided with the degree of M.D. of a French faculty. Five examinations have to be passed, and in addition a thesis written and "sustained" (defended). In the case of a foreigner already qualified to practise medicine in his own country he may on application be excused a number of examinations not exceeding three (the first three), but a refusal of this favour is not uncommon.

As regards the time necessary for the passing of these examinations qualifying for the M.D. degree, the sixteen "inscriptions" are given *en bloc* to such qualified foreigner, who may consequently pass his examinations as rapidly as is convenient to himself. Nearly all the examinations are *vivâ-voce* in French only. A foreign practitioner desirous of qualifying in France must address an application to that effect to the Minister of Public Instruction, and at the same time forward to that Minister a translation into French (by a sworn translator—*traducteur juré*) of his certificate of birth and diplomas, duly visé by the British consul. For some time past great reluctance to grant a foreign practitioner leave to enter upon his curriculum at the Paris faculty has been manifested. We need hardly remind our readers that the "Officiat de Santé"—an inferior diploma—is now abolished.

Foreigners not qualified in their own country who may wish to qualify in France may go through their curriculum at a provincial French faculty, where they may on application be excused the Preliminary Arts Examination should they have passed such examination at home. As regards the Paris Faculty, it has recently been decreed that the unqualified foreigner cannot take out his classes unless he be a "Bachelier" of the University of France.

The foreigner duly qualified to practise in France is not molested, although he cannot be blind to the existence of a jealous feeling on the part of his French *confrères*. But as he comes in contact with only consultants, whose interest it is to be complaisant, the inconvenience arising from this feeling need not be felt. Provided the foreign practitioner be not obtrusively combative and insular in his ideas his social position depends entirely on himself.

We have already on several occasions expressed our opinion that the French authorities are unwise to start the cry of "La France aux Médecins Français." Rightly or wrongly the British tourist will have his bodily ills attended to by a compatriot, and a perseverance in the anti-foreign campaign can only result in driving our travelling fellow-countrymen to Italy, whose Government is too wise to attempt to ostracise British practitioners, whose presence necessarily attracts moneyed foreigners.

ITALY.

Four years ago the British and American Consuls at the great centres of Italian population and commerce combined to form an estimate of the money brought annually into the kingdom and spent within its borders by the English-speaking world. That estimate, an approximate one necessarily, which they carefully checked by every qualifying consideration conceivable, amounted to £20,000,000 sterling, about one-third of Italy's actual revenue. This is a fact of great importance from whatever side it is contemplated. For us, as medical journalists, representing the interests of the profession, it has peculiar significance, first as implying a necessarily large and continuous demand for English-speaking practitioners, next as also implying, on the part of Italy, and in her own self-interest, a sincere wish to welcome such practitioners as one prominent among many conditions of her continuing to attract that portion of the travelling public from which she derives so much of her annual revenue. Taking the latter of these considerations first, we may state at once that every English-speaking practitioner is free to exercise his calling in any of her cities or health resorts without let or hindrance. The restrictions ruling in Switzerland and shortly to be enforced in France against his practising do not exist in the Italian kingdom. His qualification, certified by ability to produce his diploma or to point to his enrolment on the Medical Register, is quite sufficient. He has, therefore, (*a*) no examination to pass; (*b*) no fees to pay; (*c*) no Government forms to comply with; and (*d*) requires no previous residence in the country as a "condition precedent" to practice. On the other hand, in a country so financially hard-pressed as Italy and compelled to impose taxes in every direction possible, the English-speaking practitioner has to pay the heavy income-tax ("ricchezza mobile" it is called) of nearly 13½ per cent., besides being liable to the comparatively mild "tassa di famiglia" (tax on domestic servants, &c.), levied on foreign and native residents alike. There is also a tax leviable on the English-speaking practitioner if he is found to include Italians in his *clientèle*. That tax is a heavy one, but as Italians pay very small fees the temptation to have them on his visiting list need not exercise him greatly. As to the career Italy offers to the English-speaking practitioner, it is in some respects better, in other respects worse, than it was some years ago. It is better inasmuch as Italian medicine has greatly improved of late years, and the foreign practitioner, particularly in those cities which are the seat of medical schools, is not in danger, as he used to be, of getting out of touch with the advance of the profession. The late Dr. Aitken of Rome, in an interesting *communiqué*, warned his English-speaking brethren of the state of professional, particularly clinical, exile to which he condemned himself by residence in Italy. Now that drawback no longer exists. Indeed, he may keep himself *au courant* with the latest accessions to medical doctrine and practice as thoroughly and as conveniently in the Italian as in any other kingdom. Graduation at one or other of the many Italian schools—a comparatively easy and inexpensive proceeding—gives him the *entrée* to the medical societies, the congresses (provincial and national), the hospitals, the class-rooms open to the native practitioners, while entitling him to the reduced railway and steamboat fares conceded on occasion to all duly qualified Italians. Indeed, he is generally welcome to all these on the ground of professional *fratellanza* (brotherhood); but the graduation above indicated gives him the right to what he would otherwise owe merely to courtesy. On the other hand, the career is less favourable than formerly on account of the larger number of English-speaking competitors it now attracts. Rome, Florence, even Naples and Venice (as a reference to a medical directory will show), are supplied with English-speaking practitioners quite up to, perhaps beyond, their capacity to maintain them profitably. Their harvest (generally limited to the three or four months of the "season") entails immense, almost excessive, activity—compensating the comparative idleness of the months before it and after it. In that period, such is the competition, we no longer hear of the incomes of £3000 or £4000 earned a decade ago; but still a practitioner in good practice in Rome and Florence particularly can make an income well into the "four figures," and afterwards supplement it materially at one or other of the resorts open to him on his way back to the British Isles—resorts where the restrictions imposed in Switzerland and France are either not enforced or "more honoured in the breach than the observance." One word more. There are Italian cities or resorts other than those indicated where a well-qualified practitioner of winning manners and good social introductions can still find or create a remunerative *clientèle*. We do not mean those sun-traps on the Ligurian, Tuscan, or Neapolitan Riviera where the English-speaking world tends to congregate more and more every winter, but such a city as Palermo, for instance, where there is an English-speaking population sufficient to maintain a chaplain most part of the year and where the *desideratum* of a duly qualified English-speaking practitioner alone militates against a still further increase of the Anglo-American colony. A young graduate, possessing a little capital to admit of his waiting for a year or two, possessing also a colloquial command of Italian, might find Palermo a profitable field for practice as well as a pleasant place of residence—at least, in the winter months.

SWITZERLAND.

The actual disabilities of the British practitioner in Switzerland are nearly the same as they are in France, so nearly that details are unnecessary. The result of them is that the foreign candidate for practice in Switzerland must reside three or four years there and take a native degree.

UNITED STATES OF AMERICA.

A duly qualified British practitioner is permitted to practise medicine in the United States according to the laws of

each particular state or territory. In some states examinations are held, while in others endorsement by the Board of Health is sufficient. The examination fee varies in the several states from $10 to $25. Where no examinations are held no fee is charged unless the State Board of Health exists simply to inquire into the validity of applicant's diploma, when from $10 to $25 is charged. In no instance is previous residence in the United States before practising obligatory.

The Government forms which must be complied with are given in the following summary from the laws of the states and territories. While the necessity for some such legal restriction has been apparent for years, it has not come without a hard struggle on the part of the best element of the profession, and in many of the states the laws have only been operative during from three to five years. For obvious reasons it was deemed unwise to make them too drastic at first, hence the provision legalising the addition of more stringent measures during the next year or two. When the country was younger and the West was being colonised, physicians were in great demand. To meet this medical schools sprung up like mushrooms. It was not quality as much as quantity that was asked for, and these schools simply ground men out in as short a time as possible. Many of the institutions have died a natural death, but, unfortunately, not a few remain, and the only way to force them to elevate their standard is by the enactment of State laws appointing medical examining boards. In some States—New York, for instance—a certain amount of preliminary education is demanded in addition. The prospects of the British practitioner in the United States would be about equal to that of the graduates of our best schools. The cities are generally congested, having one physician to every 150 to 500 people. Probably the most promising field for an immediate pecuniary return is in the West and North-West. There and in the New England States the average fees are higher than those in Philadelphia. But for the fact that politics dominates our boards of health our cities would present a promising field for possessors of the D.P.H. certificate. No special qualification is exacted from inspectors other than the number of votes they can carry for their party; they are at the same time practising physicians. We believe that in almost any State good openings await thoroughly equipped, all-round physicians in the small towns.

The following is an epitome of the laws of the various states and territories regulating the practice of medicine:—

Maryland.—Licences are issued only under seal of either the Medical or Chirurgical Faculty of Maryland or the Maryland State Homœopathic Medical Society in the form as follows: "Be it known that ..... on the ..... day of ..... A.D., having offered us satisfactory proof that ..... was more than twenty-one years of age and had received a proper preliminary education, we therefore give a written order for the examination of said ..... before one of the boards of medical examiners of the State of Maryland; that the said ..... was fully examined before our said board and found proficient and qualified to practise medicine and surgery. The subjects for examination are anatomy, physiology, chemistry, surgery, practice of medicine, materia medica, therapeutics, obstetrics, gynæcology, pathology, medical jurisprudence, and hygiene." The proper preliminary training is defined by statute to be "a competent common school education," "a diploma from a legally incorporated medical college," with a study of three years and attendance on three courses of lectures in different years, or a diploma or licence conferring the full right to practise all the branches of medicine and surgery in some foreign country, with proof that the applicant has studied medicine for three years at least and has attended three courses of lectures in different years in some legally incorporated college prior to the granting of the said diploma or foreign licence. The boards are appointed respectively by the two medical societies. The branches are prescribed by statute. Non-graduates cannot be examined. Applicants who have been more than ten years in practice elsewhere may be licensed upon the proof presented or by special examination at the discretion of the boards of medical examiners. (1892, and amendments of 1894.) Applicants must pay an examination fee of $10 to the secretary of the Board before the examination can be taken.

Massachusetts.—A diploma "from a legally chartered medical college or university within (the) Commonwealth will entitle the person holding degree so conferred, *primâ facie*, to registration." The Board of Registration rules prescribe that graduates from such colleges shall be exempt from examination and also provide that those who present diplomas from medical schools without the State shall be given two questions, and non-graduates five, on each subject of examination. (1894.)

New Jersey.—A candidate must hold a diploma, either domestic or foreign; he must have had a competent common school education; must be twenty-one years of age; of good, moral character; and have had four years' study, three of which must have been lectures; two courses not being permitted in one calendar year; and satisfactory examination must be passed before a board of five "old" school, three homœopathic, and one eclectic, which will entitle him to a licence. The subjects of examination are prescribed by statute and are about as follows:—Materia medica and therapeutics, obstetrics, gynæcology, practice of medicine (including diseases of the skin, nose, and throat), surgery (including surgical anatomy), and diseases of the eye, ear, and genito-urinary organs, anatomy, physiology, chemistry, histology, pathology, bacteriology, hygiene, medical jurisprudence, and such other subjects as the board may decide. Homœopaths and eclectics receive separate examinations respectively in materia medica and therapeutics. Applicants for examination must present to the board at least ten days before examination a written application on a special blank form. If approved, candidates must deposit $25 examination fee, to be returned in case of failure. Licences from other States are recognised when standard of requirements is substantially the same. (1894.)

New York.—Diplomas confer no right to practise, except after a licence shall be issued upon a successful examination by one of three State Boards of Medical Examiners: the Medical Society of the State of New York, the Homœopathic Medical Society of the State of New York, or the Eclectic Medical Society of the State of New York. Applicant must be a graduate. A preliminary training is required as follows:—Successful examination by the regents in arithmetic, elementary English, geography, spelling, United States history, English composition, and physics; or graduation from a registered college; or a satisfactorily completed academical course of not less than three years in a registered academy or high school; or a preliminary education considered and accepted by the regents as fully equivalent. "Regents" means the board of regents of the University of the State of New York, who issue the medical licences under the seal of the University to applicants who have successfully passed the board's examination, if in their judgment they are duly qualified. The regents will accept a certificate of graduation from a recognised gymnasium in Germany, Austria, or Russia; a certificate of successful completion of five years' course in a registered Italian ginnasio or three years in a lieso; a bachelor's degree in arts or sciences or a substantial equivalent from any registered institution in France or Spain; any credentials from a registered institution or from the Government in any State or country which represent the completion of a course of study equivalent to graduation from a registered New York high school or academy or from a registered Prussian gymnasium. The requirements for a licence to practise medicine in New York are: 1. Applicant must be more than twenty-one years of age. 2. Certificates of moral character from not less than two physicians in good standing. 3. Evidence that applicant has the general education required preliminary to receiving the degree of bachelor or doctor of medicine in this State. 4. Evidence that applicant has studied medicine not less than four full school years of at least nine months each including four satisfactory courses of at least six months each in four different calendar years in a medical school registered as maintaining at the same time a satisfactory standard. The increase in the required course of medical study from three to four years does not take place till Jan. 1st, 1898. (Exemption 1.—The regents at their discretion may accept instead of requirements 3 and 4, evidence of five or more years of reputable practice of medicine, provided that such submission be specified in the licence.) 5. Evidence that applicant has received the degree of bachelor or doctor of medicine from some registered medical school, or a diploma or licence conferring free right to practise medicine in some foreign country. 6. The candidate must pass examinations in anatomy, physiology and hygiene, chemistry, surgery, obstetrics, pathology and diagnosis, therapeutics, practice

and materia medica. The questions shall be the same for all candidates, except that in therapeutics, practice and materia medica, all questions submitted to any candidate shall be chosen from those prepared by the board selected by that candidate, and shall be in harmony with the tenets of that school, as determined by its State Board of Medical Examiners. (Exemption 2 relates to licences from other states whose standard is not lower than that of New York. If the regents are satisfied with the amount of preliminary education possessed by a candidate, they will endorse the certificate on payment by the applicant of $10.) (1893.) 7. A fee of $25 payable in advance.

Pennsylvania.—A candidate must hold a diploma, domestic or foreign; be of full age; of good moral character; have had a competent common school education; and four years' study, to include three regular courses of lectures; and must be successfully examined on subjects prescribed by statute, before the Board of State Medical Society, Homœopathic or Eclectic Medical Society; this will entitle applicant to a licence. Licences from other States confer a right to a licence when the "standard of acquirements" is substantially the same, as determined by the State Medical Council. The State Medical Council "supervises examinations," and issues licences to those "who have successfully passed the examination of one of the three State boards," and to those who come properly accredited from other States. The State Medical Council will require from all candidates for a licence, except those now undergoing medical tuition (1895), a preliminary examination in arithmetic, grammar, geography, orthography, American history, and English composition; or in lieu thereof, a diploma of a college, diploma of an academy, seminary, normal school or high school; or a teachers' provisional certificate, with general average of not less than two; or a student's certificate of examination for admission to the freshman class in any college. (1893.)

(To be continued.)

CHANGES IN THE MEDICAL SCHOOLS AND HOSPITALS.

St. Bartholomew's Hospital.—During the past year the Governors have decided to appoint a fifth Physician and Dr. Lauder Brunton, F.R.S., has been appointed. Dr. Herringam and Dr. Tooth have been elected Assistant Physicians. Dr. Calvert and Dr. Garrod have become Medical Registrars and Demonstrators of Morbid Anatomy. Mr. Alfred Willett has resigned the Lectureship on Surgery and Mr. H. T. Butlin has been appointed to it. Dr. Chattaway has been appointed to lecture on Organic Chemistry and Dr. Edkins to lecture on Chemical Physiology. Mr. C. B. Lockwood has been elected a Demonstrator of Practical Surgery, vice Mr. D'Arcy Power, and Mr. McAdam Eccles has been appointed to a Demonstratorship of Operative Surgery. Mr. W. E. Miles has been elected an Assistant Demonstrator of Anatomy.

Charing-cross Hospital.—Mr. Stanley Boyd succeeds Mr. Bloxam as Lecturer on Surgery and Mr. Waterhouse succeeds Mr. Boyd as Lecturer on Anatomy; Mr. Gibbs succeeds Mr. Waterhouse as Senior Demonstrator of Anatomy and Dr. Galloway succeeds Dr. Mott as Medical Tutor. Mr. Gibbs has been appointed Assistant Surgeon in place of Mr. Collum deceased. Mr. James Cantlie (recently returned from Hong Kong) has been appointed to newly created lectureship of *Applied Anatomy*.

St. George's Hospital.—Mr. Rouse, Consulting Surgeon, has passed away, and Mr. Sheild has been appointed Surgeon to the Throat Department, vice Dr. Whipham. On the retirement of Dr. Fyffe from the Medical Registrarship Dr. Russell Wells was appointed to succeed him; and Mr. Ward, who has retired from the Surgical Registrarship, has been succeeded by Mr. Baldwin. Dr. Graham Little has been appointed Assistant Curator of the Museum, vice Dr. Wells.

Guy's Hospital.—There are but few changes to record in the staff of the hospital and school. Dr. Savage, for many years Lecturer on Insanity, has been elected Physician for Mental Diseases; Dr. Sykes has been appointed Lecturer on Public Health in place of Mr. George Turner, who has accepted an important position in Cape Colony; and Dr. T. G. Stevens, as Demonstrator of Biology, succeeds Dr. Campbell, who has been appointed Physician to the Bradford Infirmary.

King's College Hospital.—Mr. Carless, Teacher in Operative Surgery, has succeeded Mr. Boyce Barrow.

London Hospital.—Since last year a vacancy has occurred on the staff through the lamented death of Dr. Ralfe. The Assistant Physiciancy rendered vacant thereby has been filled by the appointment of Dr. B. E. Dawson. Two Dental Surgeons, Mr. Cunningham and Mr. Dolamore, have been appointed in place of Mr. Barrett, whose term of service had expired. The Dental Surgeon now attends four days a week, and greatly increased facilities are now offered for the study of this branch of the profession. A Medical Officer in charge of the Electrical Department has also been appointed—viz., Dr. W. S. Hedley. In the college Dr. Ralfe's Lectureship on Public Health has been filled by the appointment of Dr. Schorstein, D.P.H. Dr. F. J. Smith has resigned the teaching of Materia Medica, and both Mr. Cunningham and Mr. Dolamore lecture on Dental Surgery.

St. Mary's Hospital.—Sir William Broadbent, on his retirement from the post of Senior Physician, was appointed Consulting Physician to the hospital and also a Vice-President; Dr. Sidney Phillips has been appointed Physician to In-patients; Dr. John Anderson has been appointed Lecturer on Tropical Diseases, and Mr. H. G. Plimmer, Bacteriologist. Dr. Caley has been elected Senior Medical Tutor, vice Dr. Sidney Phillips resigned.

Middlesex Hospital.—The following changes have taken place in the medical staff of the school and hospital:—Mr. George Lawson, surgeon, resigned; Mr. A. Pearce Gould, assistant surgeon, appointed Surgeon; Mr. John Murray, appointed Assistant Surgeon; Dr. H. C. Thomson, appointed Medical Registrar, vice Dr. Wethered, resigned; Mr. P. H. Wells, appointed Casualty Medical Officer, vice Mr. Wanklyn; Mr. A. Baldwin, appointed Casualty Surgical Officer, vice Mr. Thomas; Dr. Sydney Coupland, Joint Lecturer in Medicine; Dr. William Pasteur, Lecturer in Practical Medicine, vice Dr. Coupland; Mr. A. Pearce Gould, Lecturer in Clinical Surgery, vice Mr. Lawson; Dr. F. J. Wethered, Lecturer in Forensic Medicine; Dr. Arthur Robinson, Lecturer in Anatomy, vice Mr. Sutton, resigned; Dr. A. F. Voelcker, Lecturer in Pathological Anatomy, vice Dr. Fowler, resigned; Dr. R. A. Young, Lecturer in Physiology, vice Mr. Lowne, resigned, and Lecturer in Biology, vice Dr. Voelcker; Dr. W. Pasteur, Dean of the School, vice Dr. Coupland.

St. Thomas's Hospital.—The following changes have been made: Dr. W. W. H. Tate, Assistant Obstetric Physician and Teacher of Practical Obstetrics, vice Dr. Cory, who retains the charge of the Vaccination Department; Mr. J. H. Fisher, M.B., B.S Lond., F.R.C.S., Assistant Ophthalmic Surgeon on the retirement of Mr. Nettleship, Senior Ophthalmic Surgeon. Dr. E. H. G. Morris and Dr. Harold Low, Junior Anæsthetists; Dr. H. P. Hawkins, Dean of the Medical School in succession to Mr. Makins; Dr. L. L. Jenner, Demonstrator of Morbid Histology and Bacteriology.

University College Hospital.—Professor Victor Horsley, B.S., F.R.S., resigned the Chair of Pathology, and Professor Sidney Martin, M.D., F.R.S., has been appointed to succeed him.

Westminster Hospital.—An important change in the active staff of the hospital has been due to the appointment of Mr. Cowell as Consulting Surgeon. As a consequence of this change Mr. Stonham has been appointed Surgeon, Mr. de Santi Assistant-Surgeon, and Mr. Paton Surgical Registrar. Dr. Hebb has been appointed Vice-Dean. Mr. Black has resigned the post of Aural Surgeon to the hospital and Lecturer on Aural Surgery, and the department has been put under the charge of Mr. de Santi. Mr. Yearsley has resigned the posts of Curator of the Museum, Assistant Demonstrator of Anatomy and Demonstrator of Surgical Pathology. These posts have been filled by the appointment of Mr. E. Canny Ryall to be Curator of the Museum, Mr. Tubby to be Demonstrator of Anatomy, and Mr. Paton to be Demonstrator of Surgical Pathology.

London School of Medicine for Women.—Mr. A. B. Barrow, F.R.C.S., has been appointed Lecturer on Surgery at the school. At the hospital Raymond H. P. Crawford, M.A., M.D. Oxon., M.R.C.P., takes the place of James Calvert, M.D. Lond., F.R.C.P., resigned, Assistant Physician, and Dr. Willmott Evans, F.R.C.P., has been appointed Assistant Surgeon. Mrs. Percy Flemming, M.D. Lond., and Miss Aldrich-Blake, M.D., M.S. Lond., have been appointed respectively Medical and Surgical Registrars. Miss Turner, L.R.C.P. and S. Edin., has been appointed Senior Assistant to Anæsthetist; Miss Bennett, M.D. Lond., Gynæcological Clinical Assistant; and Miss Corthorn, M.B., B.S. Lond.,

Ophthalmological Clinical Assistant. Miss Edith Knight, M.B. Lond., has been appointed Curator of the Museum.

National Dental Hospital.—Mr. A. Hopewell Smith, M.R.C.S., L.R.C.P., L.D.S. Eng., has been appointed Lecturer on Dental Surgery and Pathology. Mr. W. Rushton, has been appointed Dental Surgeon. Mr. H. J. Relph has been appointed Assistant Dental Surgeon, and Dr. Flux has been appointed Anæsthetist.

Dental Hospital of London.—Mr. James Smith Turner, M.R.C.S., L.D.S., has been appointed Consulting Dental Surgeon in place of Sir John Tomes, deceased, and Mr. Charles Tomes, F.R.S., M.A. Oxon., M.R.C.S., L.D.S., has been appointed Lecturer on Dental Anatomy and Physiology in place of Mr. Arthur Underwood, resigned.

Mason College, Birmingham.—Mr. John Barclay, B.Sc. Lond., having resigned the Lectureship on Materia Medica, Mr. Dencer Whittles, L.D.S., has succeeded him.

Bristol Royal Infirmary.—Dr. R. P. Lansdown has been appointed Surgeon in the room of Mr. W. J. Penny, resigned, and Dr. J. L. Firth Assistant Surgeon.

Royal Infirmary, Newcastle-on-Tyne.—Thomas Beattie, M.D., has been appointed Pathologist, vice David Drummond, M.A., M.D., resigned; and George Redmayne Murray, M.A., M.D., has been appointed Physician, vice G. H. Philipson, M.A., M.D., F.R.C.P., resigned.

Leeds General Infirmary.—Mr. H. Littlewood has been appointed Honorary Surgeon to the hospital, vice Mr. Hartley, resigned.

Owens College, Manchester.—Dr. Arthur Robinson resigned the Senior Demonstratorship on his appointment to the Lectureship on Anatomy at the Middlesex Hospital Medical School. Peter Thompson, M.B., Ch.B., has been appointed Senior Demonstrator, and H. U. Alcock, M.A., M.D., &c., has been elected Junior Demonstrator. Owing to the resignation of Dr. Menzies and the death of Dr. R. M. Horne the Demonstratorships in Physiology are both vacant. F. C. Moore, M.Sc., M.B., Ch.B., has been appointed to the Demonstratorship in Pathology.

Radcliffe Infirmary.—G. J. Wilson, M.D., has been elected Physician.

Sheffield School of Medicine.—Mr. R. J. Pye-Smith has been appointed Lecturer on Surgery in the place of the late Mr. Arthur Jackson; Mr. C. Atkin has been appointed Lecturer on Practical Surgery; and Dr. Sinclair White Lecturer on Operative Surgery, vice Mr. Pye-Smith, resigned. Dr. Christopher Addison has been appointed Lecturer on Anatomy, and Mr. Edward Skinner Lecturer on Osteology. Mr. C. Atkin has been elected Surgeon to the Sheffield General Infirmary. Messrs. Drabble, Harrison, Mordaunt, Pike, Stokes, and Tolputt have been appointed Dental Surgeons to the Sheffield Royal Hospital.

University College, Dundee.—Professor Kuenen, Ph.D., has been appointed Lecturer in Physics.

St. Mungo's College.—Dr. Walter K. Hunter and Dr. J. B. Mackenzie Anderson to be extra Dispensary Physicians; Dr. Jas. K. Kelly to be Physician for Diseases of Women, in room of Dr. Stirton, resigned; Dr. G. Balfour Marshall to be Gynæcologist, in room of Dr. Jas. K. Kelly, promoted; Dr. Jas. W. Allan to be a Dispensary Physician in room of Dr. A. G. Auld, resigned; and Dr. R. Home Henderson to be Vaccinator, in place of Hugh Thomson, deceased.

Anderson's College.—John Edgar, M.A., B.Sc., M.B., has been appointed Professor of Midwifery and Diseases of Women and Children, vice William L. Reid, M.D., resigned.

OPENING OF THE MEDICAL SCHOOLS.

WINTER SESSION, 1896-97.

METROPOLITAN.

St. Bartholomew's Hospital.—The session will commence on Oct. 1st. There will be the usual dinner of old students in the great hall of the hospital.

Charing Cross Hospital.—The session opens on Oct. 5th, when Professor Michael Foster, M.D., D.C.L., D.Sc., LL.D., will deliver the first Huxley Lecture, on "Recent Advances in Science and their bearing on Medicine and Surgery." This lecture will be delivered in the anatomical theatre of the medical school at 4 P.M.

St. George's Hospital.—The introductory address will be delivered on Oct. 1st, at 4 P.M., by Mr. W. Adams Frost, F.R.C.S., ophthalmic surgeon to the hospital, and the dinner will take place at the Whitehall Rooms at 7 P.M. on the same date, Mr. Edgcumbe Venning, F.R.C.S., in the chair.

Guy's Hospital.—The opening of the session will be inaugurated by the biennial festival dinner, which will be held on the evening of Oct. 1st at the Hôtel Cecil. Dr. Frederick Taylor will take the chair at 7 o'clock. The secretary of the festival is Mr. Charters Symonds.

King's College Hospital.—The Principal and staff of the Medical School invite students, their parents, and friends to a reception at King's College from 4 to 6 o'clock on Oct. 1st. The reception will be preceded by a distribution of prizes at 3 o'clock. In the evening there will be a dinner of old students at Limmer's Hotel.

London Hospital.—The session will commence on Oct. 1st, and the old students' dinner, which will this year take the place of an opening ceremony, will be held in the College library the same evening at 7 o'clock. The chair will be taken by Mr. Frederick Treves.

St. Mary's Hospital.—The introductory address, on Oct. 1st, will be delivered by Mr. Morton Smale, surgeon in charge of the Dental Department. The annual dinner of past and present students will be held at the King's Hall, Holborn Restaurant, on the same evening, Dr. Farquharson, M.P., in the chair.

Middlesex Hospital.—The school will open on Oct. 1st, when the introductory lecture will be given by Dr. W. Essex Wynter, M.R.C.P. The annual dinner will take place at the Café Royal, Regent-street, at 7 o'clock, Mr. T. W. Nunn, F.R.C.S., consulting surgeon to the hospital, in the chair.

St. Thomas's Hospital.—The distribution of prizes by the Right Hon. Lord Justice Lindley at 3 P.M. will take place on Oct. 2nd in the Governors' Hall. The annual dinner (old students) will be held at the Whitehall Rooms at 6.30 P.M. the same evening, Dr. Wyman in the chair.

University College.—The session will open on Oct. 1st, when the address will be given by Dr. Sidney Martin, M.D., F.R.S. The annual dinner of the old and present students will be held at the Hôtel Cecil. Professor Michael Foster, F.R.S., will preside.

Westminster Hospital.—The introductory address will be delivered by Dr. Wills on Oct. 1st, at 4 P.M., at the School, Caxton-street, and will be immediately followed by the distribution of prizes. The annual dinner will take place at the Westminster Palace Hotel, at 7 P.M., Mr. Thomas Bond, F.R.C.S., in the chair.

London School of Medicine for Women (Royal Free Hospital).—The session opens on Oct. 1st at 3.30 P.M. Mr. A. Boyce Barrow, F.R.C.S., M.B. Lond., senior surgeon, Royal Free Hospital, surgeon, King's College Hospital, will deliver the address.

School of the Pharmaceutical Society.—An inaugural address to the students will be given Mr. R. Brudenell Carter, F.R.C.S., Member of the General Medical Council and Member of the Pharmacopœia Committee of the General Medical Council, on Oct. 5th.

National Dental Hospital, Great Portland-street.—Opening date, Oct. 1st.

Dental Hospital, Leicester-square.—Session commences Oct. 1st.

PROVINCIAL.

Mason College, Birmingham.—Opening day, Oct. 1st. A conversazione, with prize distribution, will be held on the evening of Oct. 2nd. The lectures commence Oct. 5th.

University College, Bristol.—Opening date, Oct. 1st.

University of Durham College of Medicine, Newcastle-on-Tyne.—The session will be opened on Oct. 1st, when the annual distribution of scholarships and prizes will take place.

Yorkshire College, Leeds.—The thirteenth session of the medical department will be opened on Oct. 1st, at 5 P.M., when an address will be delivered and the prizes distributed by Professor Victor A. H. Horsley, F.R.C.S., F.R.S.

University College, Liverpool.—The session commences on Oct. 1st.

The Owens College, Manchester.—The session will be opened on Oct. 2nd, at 4 P.M. An introductory address will be delivered in the Physiological Theatre of the New Medical Buildings by Mr. Jonathan Hutchinson, LL.D., F.R.S., F.R.C.S., &c., on the Scope and Methods of Modern Medical Education.

Radcliffe Infirmary.—Session commences on Oct. 17th.

Sheffield School of Medicine.—The introductory address will be delivered by Sir Henry Littlejohn, M.D., LL.D., in the lecture hall of Firth College on Oct. 1st. The annual lecturer's dinner will be held in the evening.

SCOTLAND.

University College, Dundee.—Opening date, Oct. 12th.

St. Mungo's College.—The address to medical students will be given on Oct. 21st.

Anderson's College, Glasgow.—Session begins on Oct. 15th.

St. Andrews University.—The session commences on Oct. 6th.

IRELAND.

Queen's College, Belfast.—The first term of the winter session opens on Oct. 20th.

Queen's College, Cork.—The scholarship examinations begin on Oct. 22nd, and the lectures commence on Oct. 26th.

Queen's College, Galway.—The session opens on Oct. 15th.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6342 births and 3619 deaths were registered during the week ending Aug. 29th. The annual rate of mortality in these towns, which had declined in the five preceding weeks from 24·8 to 18·8 per 1000, further fell during that week to 17·4. In London the rate was 16·1 per 1000, while it averaged 18·3 in the thirty-two provincial towns. The lowest rates in these towns were 11·0 in Norwich, 12·4 in Croydon, 13·1 in Leicester, and 13·2 in Nottingham; the highest rates were 22·4 in Birmingham, 23·3 in Gateshead, 23·7 in Plymouth, and 24·8 in Hull. The 3619 deaths included 610 which were referred to the principal zymotic diseases, against 1010 and 786 in the two preceding weeks; of these, 326 resulted from diarrhœa, 63 from whooping-cough, 61 from measles, 59 from diphtheria, 56 from "fever" (principally enteric), 45 from scarlet fever, and not one from small-pox. The lowest death-rates from these diseases were recorded in Halifax, Bradford, Swansea, and Blackburn, and the highest rates in Birkenhead, Sheffield, Hull, and Derby. The greatest mortality from measles occurred in Oldham, Derby, and Gateshead; from scarlet fever in Birkenhead; from whooping-cough in Birkenhead, Hull, and Sunderland; from "fever" in Sheffield, Derby, and Sunderland; and from diarrhœa in Preston, Plymouth, Wolverhampton, and Bolton. The 59 deaths from diphtheria included 32 in London, 4 in West Ham, and 4 in Birmingham. No death from small-pox was registered in any of the thirty-three large towns. There were 16 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday, Aug. 29th, against 22 and 18 at the end of the two preceding weeks; 6 new cases were admitted during the week, against 5, 2, and 4 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 3443, against 3369, 3368, and 3437 on the three preceding Saturdays; 333 new cases were admitted during the week, against 366, 378, and 416 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 135 and 145 in the two preceding weeks, further rose to 149 during the week, and slightly exceeded the corrected average. The causes of 51, or 1·4 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Nottingham, Salford, Bradford, Leeds, Newcastle-upon-Tyne, and in eleven other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Norwich, and Preston.

In thirty-three of the large English towns 5950 births and 3432 deaths were registered during the week ending Saturday, Sept. 5th. The annual rate of mortality in these towns, which had declined in the six preceding weeks from 24·8 to 17·4 per 1000, further fell last week to 16·5. In London the rate was 15·4 per 1000, while it averaged 17·2 in the thirty-two provincial towns. The lowest rates in these towns were 9·3 in Croydon, 10·8 in Derby, 11·6 in Swansea, and 11·7 in Portsmouth; the highest rates were 20·3 in Sheffield, 21·0 in Manchester, 21·1 in Wolverhampton, and 21·7 in Bolton. The 3432 deaths included 536 which were referred to the principal zymotic diseases, against 786 and 610 in the two preceding weeks; of these, 222 resulted from diarrhœa, 76 from diphtheria, 68 from whooping-cough, 66 from measles, 55 from "fever" (principally enteric), 49 from scarlet fever, and not one from small-pox. No fatal case of any of these diseases was recorded last week either in Plymouth or in Norwich; in the other towns they caused the lowest death-rates in Croydon, Swansea, Huddersfield, and Halifax, and the highest rates in Wolverhampton, Manchester, Preston, and Hull. The greatest mortality from measles occurred in Manchester, Nottingham, and Hull; from scarlet fever in Oldham; from whooping-cough in Cardiff, Birkenhead, Salford, and Preston; from "fever" in Wolverhampton and Preston; and from diarrhœa in Brighton, Bristol, Preston, and Sheffield. The 76 deaths from diphtheria included 49 in London, 6 in Birmingham, and 6 in Liverpool. No fatal case of small-pox was registered in any of the thirty-three large towns. There were 16 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 5th inst., against 22, 18, and 16 at the end of the three preceding weeks; 2 new cases were admitted during the week, against 2, 4, and 6 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 3610, against 3370, 3437, and 3443 on the three preceding Saturdays; 484 new cases were admitted during the week, against 373, 416, and 333 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 145 and 149 in the two preceding weeks, declined again to 135 last week, and were 16 below the corrected average. The causes of 40, or 1·2 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Cardiff, Nottingham, Bradford, Newcastle-upon-Tyne, and in eleven other smaller towns; the largest proportions of uncertified deaths were registered in Wolverhampton, Birmingham, Salford, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 16·1 and 16·5 per 1000 in the two preceding weeks, declined again to 16·3 during the week ending Aug. 29th, and was 1·1 per 1000 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 12·6 and 13·3 in Aberdeen and Leith, to 18·1 and 20·5 in Glasgow and Perth. The 476 deaths in these towns included 51 which were referred to diarrhœa, 14 to measles, 13 to whooping-cough, 8 to scarlet fever, 5 to "fever," and 2 to diphtheria. In all, 93 deaths resulted from these principal zymotic diseases, against 73 and 87 in the two preceding weeks. These 73 deaths were equal to an annual rate of 3·2 per 1000, which was 0·3 above the mean rate for the week from the same diseases in the thirty-three large English towns. The fatal cases of diarrhœa, which had been 28 and 41 in the two preceding weeks, rose during the week to 51, of which 22 occurred in Glasgow and 7 in Edinburgh. The deaths referred to measles, which had been 20 and 15 in the two preceding weeks, declined to 14, and included 12 in Glasgow, and 2 in Edinburgh. Of the 13 fatal cases of whooping-cough, fewer by 5 than those in the preceding week, 8 were recorded in Glasgow and 2 both in Edinburgh and in Aberdeen. The 8 deaths from scarlet fever showed a further increase upon the numbers in recent weeks, and included 3 in Aberdeen, 2 in Glasgow, and 2 in Paisley. Four of the 5 deaths referred to "fever" occurred in Glasgow. The deaths referred to diseases of the respiratory organs, which had been 59 and 67 in the two preceding weeks, declined again during the week to 56, but exceeded the number in the

corresponding week of last year by 6. The causes of 26, or more than 5 per cent., of the deaths registered in these eight towns during the week were not certified.

The annual rate of mortality in the eight Scotch towns, which had been 16·5 and 16·3 per 1000 in the two preceding weeks, rose again to 18·1 during the week ending Sept. 5th, and was 1·6 per 1000 above the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 11·5 in Aberdeen and 12·0 in Perth, to 20·2 in Greenock and 22·5 in Leith. The 528 deaths in these towns included 43 which were referred to diarrhœa, 15 to scarlet fever, 13 to measles, 9 to whooping-cough, 6 to "fever" (principally enteric), and 4 to diphtheria. In all, 90 deaths resulted from these principal zymotic diseases, against 87 and 93 in the two preceding weeks. These 90 deaths were equal to an annual rate of 3·1 per 1000, which was 0·5 above the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of diarrhœa, which had increased from 28 to 51 in the three preceding weeks, declined again last week to 43, of which 25 occurred in Glasgow, and 6 in Edinburgh. The deaths referred to scarlet fever, which had been 3, 7, and 8 in the three preceding weeks, further rose to 15 last week, and included 5 in Leith and 3 in Glasgow. The 13 fatal cases of measles were within 1 of the number recorded in the preceding week, and included 12 in Glasgow. The deaths from whooping-cough, which had been 18 and 13 in the two preceding weeks, further declined to 9 last week, of which 5 occurred in Glasgow. The 6 fatal cases of "fever" showed a slight further increase upon those returned in recent weeks, and were all recorded in Glasgow, where 3 of the 4 deaths from diphtheria were also registered. The deaths referred to diseases of the respiratory organs in these towns, which had been 67 and 58 in the two preceding weeks, rose again to 72 last week, and exceeded by 16 the number in the corresponding period of last year. The causes of 32, or more than 6 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 21·6 and 24·9 per 1000 in the two preceding weeks, declined again to 21·2 during the week ending Aug. 29th. During the first nine weeks of the current quarter the death-rate in the city has averaged 24·5 per 1000, the rate during the same period being 20·5 in London and 15·6 in Edinburgh. The 142 deaths registered in Dublin during the week under notice showed a decline of 25 from the number in the preceding week, and included 22 which were referred to the principal zymotic diseases, against 25 and 28 in the two preceding weeks; of these 17 resulted from diarrhœa, 3 from "fever," 2 from scarlet fever, but not one either from small-pox, measles, diphtheria, or whooping-cough. These 22 deaths were equal to an annual rate of 3·3 per 1000, the zymotic death-rate during the same period being 2·3 both in London and in Edinburgh. The fatal cases of diarrhœa, which had been 16 and 21 in the two preceding weeks, declined to 17 during the week. The deaths referred to different forms of "fever," which had been 4 in each of the two preceding weeks, were 3 during the week. The fatal cases of scarlet fever, which had been 4 and 1 in the two preceeding weeks, rose again to 2 during the week. The 142 deaths in Dublin included 35 of infants under one year of age and 31 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons showed a decline from the numbers recorded in the preceding week. Five inquest cases and 4 deaths from violence were registered; and 50, or more than a third, of the deaths occurred in public institutions. The causes of 9, or more than 6 per cent., of the deaths in the city during the week were not certified.

The rate of mortality in Dublin, which had been 24·9 and 21·2 per 1000 in the two preceding weeks, rose again to 23·3 during the week ending September 5th. During the past ten weeks of the current quarter the death-rate in the city has averaged 24·4 per 1000, the rate during the same period being 20·0 in London and 15·8 in Edinburgh. The 156 deaths registered last week in Dublin showed an increase of 14 upon the number in the preceding week, and included 20 which were referred to the principal zymotic diseases, against 28 and 22 in the two preceding weeks; of these, 9 resulted from diarrhœa, 5 from scarlet fever, 3 from whooping-cough, 2 from "fever," 1 from diphtheria, and not one either from small-pox or measles. These 20 deaths were equal to an annual rate of 3·0 per 1000, the zymotic death-rate during the same period being 2·4 in London and 1·9 in Edinburgh. The fatal cases of diarrhœa, which had been 21 and 17 in the two preceding weeks, further declined to 9 last week. The 5 deaths from scarlet fever showed a further increase upon the numbers in the two preceding weeks, and the 3 fatal cases of whooping-cough also exceeded those recorded in any recent week. The deaths referred to different forms of "fever," which had been 4 and 3 in the two preceding weeks, further declined to 2 last week. The 156 deaths in Dublin last week included 35 of infants under one year of age, and 28 of persons aged sixty years and upwards; the deaths of infants corresponded with those recorded in the preceding week, while those of elderly persons showed a further decline. Four inquest cases and 4 deaths from violence were registered; and 62, or more than a third, of the deaths occurred in public institutions. The causes of 8, or more than 5 per cent., of the deaths in the city last week were not certified.

VITAL STATISTICS OF LONDON DURING AUGUST, 1896.

In the accompanying table will be found summarised complete statistics relating to sickness and mortality during August in each of the forty-three sanitary areas of London. With regard to the notified cases of infectious disease in the metropolis during last month, it appears that the number of persons reported to be suffering from one or other of the nine diseases specified in the table was equal to 13·1 per 1000 of the population, estimated at 4,421,955 persons in the middle of this year. In the three preceding months the rates had been 9·2, 10·3, and 12·4 per 1000 respectively. Among the various sanitary areas the rates were considerably below the average in St. George Hanover-square, Hampstead, City of London, St. Olave Southwark, Lewisham, and Lee; while they showed the largest excess in St. Martin-in-the-Fields, St. Luke, Bethnal Green, Whitechapel, Mile End Old Town, and Rotherhithe. The prevalence of small-pox in London during August showed a further marked decline; the 15 cases notified included 7 in Islington and 2 in Hackney sanitary areas. The Metropolitan Asylum Hospitals contained 12 small-pox patients at the end of August, against 15, 30, and 23 at the end of the three preceding months; the weekly admissions averaged 3, against 4, 10, and 6 in the three preceding months. The prevalence of scarlet fever in London showed a slight further increase upon that recorded in recent months; this disease was proportionally most prevalent in Marylebone, Clerkenwell, St. Luke, Bethnal Green, Whitechapel, Mile End Old Town, and Woolwich sanitary areas. The Metropolitan Asylum Hospitals contained 3348 scarlet fever patients at the end of August, against 2614, 2795, and 3170 at the end of the three preceding months; the weekly admissions averaged 362, against 273, 310, and 399 in the three preceding months. The prevalence of diphtheria in London during August showed a slight decline from that recorded in the preceding month; among the various sanitary areas this disease showed the highest proportional prevalence in Chelsea, Bethnal Green, Whitechapel, St. George Southwark, Newington, Rotherhithe, and Camberwell. There were 688 diphtheria patients under treatment in the Metropolitan Asylum Hospitals at the end of August, against 703, 704, and 713 at the end of the three preceding months; the weekly admissions averaged 89, against 95, 111, and 114 in the three preceding months. The prevalence of enteric fever in London showed a further marked increase upon that recorded in recent months; this disease was proportionally most prevalent in Holborn, Mile End Old Town, and Plumstead sanitary areas. Erysipelas was proportionally most prevalent in Holborn, St. Luke, Bethnal Green, St. George-in-the-East, and Rotherhithe sanitary areas. The 20 cases of puerperal fever notified during August included 3 in Kensington, 3 in St. Pancras, 2 in Chelsea, 2 in Hampstead, and 2 in Plumstead sanitary areas.

The mortality statistics in the table relate to the deaths of persons actually belonging to the various sanitary areas, the deaths occurring in the institutions of London having been distributed among the various sanitary areas in which the patients had previously resided. During the four weeks ending Saturday,

ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON—AUGUST, 1896.

(Specially compiled for THE LANCET.)

SANITARY AREAS.	Estimated population in the middle of 1896.	NOTIFIED CASES OF INFECTIOUS DISEASE.											DEATHS FROM PRINCIPAL INFECTIOUS DISEASES.										Deaths from all causes.	Death-rate per 1000 living.	Deaths of infants under one year to 1000 births.
		Small-pox.	Scarlet fever.	Diphtheria.*	Typhus fever.	Enteric fever.	Other continued fevers.	Puerperal fever.	Erysipelas.	Cholera.	Total.	Annual rate per 1000 persons living.	Small-pox.	Measles.	Scarlet fever.	Diphtheria.†	Whooping-cough.	Typhus fever.	Enteric fever.	Other continued fevers.	Diarrhœa.	Total.	Annual rate per 1000 persons living.			
LONDON...	4,421,955	15	2491	1005	—	312	8	20	578	6	4436	13·1	—	124	69	204	123	1	46	1	776	1359	4·0	6113	18·0	215
West Districts.																										
Paddington	124,838	—	66	15	—	4	—	—	11	—	96	10·0	—	1	—	4	1	—	—	—	20	26	2·7	138	14·4	226
Kensington	170,660	—	98	29	—	11	1	3	35	—	177	13·5	—	—	3	5	6	—	—	—	14	28	2·1	189	14·4	209
Hammersmith	104,551	—	44	11	—	8	—	—	10	—	73	9·1	—	—	1	3	2	—	—	—	20	26	3·2	142	17·7	241
Fulham	115,008	—	77	23	—	2	1	—	5	1	114	12·9	—	2	2	8	3	—	—	—	27	42	4·8	151	17·1	214
Chelsea	96,657	1	51	48	—	6	—	2	7	—	115	15·5	—	3	1	13	—	—	1	—	23	41	5·5	142	19·2	237
St. George Hanover-square	80,041	—	28	7	—	6	—	—	4	—	45	7·3	—	1	1	—	—	—	1	—	5	8	1·3	82	13·4	178
Westminster	53,477	—	26	3	—	2	—	—	11	—	42	10·2	—	2	—	1	3	—	2	—	9	17	4·1	67	16·3	157
St. James Westminster	22,955	—	8	3	—	—	—	—	4	—	15	8·5	—	4	—	—	—	—	—	—	2	6	3·4	38	21·6	344
North Districts.																										
Marylebone	141,114	—	109	29	—	13	—	—	24	—	175	16·2	—	4	3	3	2	—	2	—	10	24	2·2	180	16·6	172
Hampstead	75,812	—	13	11	—	3	—	2	5	—	34	5·8	—	1	—	2	1	—	—	—	5	9	1·5	62	10·7	183
St. Pancras	241,066	—	100	26	—	23	—	3	37	—	189	10·2	—	6	3	12	16	—	3	—	31	71	3·8	361	19·5	213
Islington	337,679	7	217	71	—	25	—	1	38	—	359	13·9	—	5	4	15	14	—	2	—	48	88	3·4	421	16·3	216
Stoke Newington	33,615	—	16	6	—	1	—	—	4	—	27	10·5	—	1	—	1	—	—	—	—	8	10	3·9	27	10·5	175
Hackney	213,774	2	139	36	—	23	—	—	19	—	219	13·4	—	12	4	8	2	1	3	—	35	65	4·0	277	16·9	184
Central Districts.																										
St. Giles	38,158	—	16	3	—	1	—	1	7	—	28	9·6	—	1	—	1	—	—	—	—	4	6	2·0	52	17·8	125
St. Martin-in-the-Fields	13,003	—	8	4	—	1	1	—	3	—	17	17·1	—	—	—	—	—	—	1	—	1	2	2·0	19	19·1	286
Strand	24,820	—	14	4	—	—	—	—	1	—	19	10·4	—	—	1	—	—	—	—	—	4	5	2·7	34	18·6	267
Holborn	30,932	—	8	6	—	6	—	1	8	—	29	12·2	—	—	—	2	1	—	—	—	4	7	2·9	54	22·8	211
Clerkenwell	66,185	—	55	14	—	2	—	—	7	—	78	15·4	—	2	1	1	2	—	1	—	18	25	4·9	105	20·7	202
St. Luke	41,478	—	31	9	—	4	—	—	13	—	57	17·9	—	1	3	4	—	—	—	—	8	16	5·0	76	23·9	246
City of London	31,409	—	14	3	—	—	—	—	2	—	19	7·9	—	1	—	2	1	—	—	—	—	4	1·7	41	17·0	222
East Districts.																										
Shoreditch	122,265	—	76	27	—	12	1	—	27	—	143	15·2	—	12	1	5	1	—	2	—	19	40	4·3	166	17·7	204
Bethnal Green	129,151	—	134	49	—	9	—	—	33	—	225	22·7	—	2	3	4	1	—	1	—	26	37	3·7	217	21·9	244
Whitechapel	78,886	—	90	33	—	8	—	—	6	—	137	22·6	—	6	6	4	2	—	—	1	8	27	4·5	126	20·8	187
St. George-in-the-East	47,584	—	25	12	—	—	—	—	14	—	51	14·0	—	7	2	2	2	—	—	—	12	25	6·8	112	30·7	208
Limehouse	58,347	—	36	19	—	2	—	—	14	—	71	15·9	—	3	1	1	1	—	—	—	13	19	4·2	114	25·5	267
Mile End Old Town	111,226	1	89	36	—	16	1	1	13	—	157	18·4	—	11	—	8	3	—	1	—	17	40	4·7	179	21·0	205
Poplar	169,379	—	86	50	—	19	3	—	26	1	185	14·2	—	1	5	6	2	—	4	—	54	72	5·5	303	23·3	237
South Districts.																										
St. Saviour Southwark	25,276	—	12	7	—	—	—	—	4	—	23	11·9	—	—	—	2	2	—	—	—	8	12	6·2	58	29·9	301
St. George Southwark	60,301	—	33	24	—	3	—	—	5	—	65	14·1	—	5	1	5	2	—	1	—	13	27	5·8	118	25·5	275
Newington	121,191	1	62	53	—	8	—	—	22	—	146	15·7	—	1	2	10	4	—	2	—	33	52	5·6	191	20·5	295
St. Olave Southwark	11,673	—	5	—	—	—	—	—	1	—	6	6·7	—	1	1	—	1	—	—	—	5	8	8·9	21	23·5	192
Bermondsey	85,508	—	44	22	—	4	—	—	15	—	85	13·0	—	6	—	5	3	—	1	—	14	29	4·4	134	20·4	183
Rotherhithe	40,432	—	16	19	—	3	—	1	16	1	56	18·1	—	4	1	4	4	—	1	—	8	22	7·1	71	22·9	204
Lambeth	296,036	1	161	50	—	20	—	—	26	—	258	11·4	—	6	3	12	5	—	2	—	45	73	3·2	350	15·4	184
Battersea	165,864	1	112	24	—	8	—	—	20	—	165	13·0	—	6	3	5	7	—	3	—	44	68	5·3	213	16·7	215
Wandsworth	188,908	—	63	27	—	8	—	1	28	1	128	8·8	—	—	2	6	7	—	2	—	33	50	3·5	208	14·4	206
Camberwell	253,975	—	119	102	—	18	—	—	25	1	265	13·6	—	6	5	21	10	—	5	—	46	93	4·8	339	17·4	203
Greenwich	176,203	—	98	56	—	12	—	1	18	—	185	13·7	—	7	3	10	9	—	1	—	37	67	5·0	250	18·5	223
Lewisham (excluding Penge)	83,795	—	28	10	—	9	—	1	4	—	52	8·1	—	1	1	2	—	—	3	—	19	26	4·0	96	14·9	240
Woolwich...	41,334	—	29	5	—	2	—	—	3	—	39	12·3	—	1	2	4	2	—	—	—	11	20	6·3	81	25·5	311
Lee	38,714	—	12	—	—	1	—	—	1	—	14	4·7	—	1	—	—	3	—	—	—	3	7	2·4	41	13·8	206
Plumstead	59,610	—	22	15	—	6	—	2	2	1	48	10·5	—	—	—	—	3	—	1	—	12	19	4·2	67	14·6	199
Port of London	—	1	1	—	—	3	—	—	—	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Including 26 cases of membranous croup.

† Including deaths from membranous croup.

August 29th, the deaths of 6113 persons belonging to London were registered, equal to an annual rate of 18·0 per 1000, against 17·2, 16·1, and 21·8 in the three preceding months. The lowest death-rates during August in the various sanitary areas were 10·5 in Stoke Newington, 10·7 in Hampstead, 13·4 in St. George Hanover-square, 13·8 in Lee, and 14·4 in Paddington, in Kensington, and in Wandsworth; the highest rates were 23·3 in Poplar, 23·5 in St. Olave Southwark, 23·9 in St Luke, 25·5 in Limehouse, in St. George Southwark, and in Woolwich, 29·9 in St. Saviour Southwark, and 30·7 in St. George-in-the-East. During the four weeks of August 1359 deaths were referred to the principal zymotic diseases in London; of these, 776 resulted from diarrhœa, 204 from diphtheria, 134 from measles, 128 from whooping-cough, 69 from scarlet fever, 46 from enteric fever, 1 from typhus, and 1 from simple continued fever. These 1359 deaths were equal to an annual rate of 4·0 per 1000; among the various sanitary areas the lowest death-rates from these diseases were recorded in Kensington, St. George Hanover-square, Hampstead, St. Giles, St. Martin-in-the-Fields, and City of London; and the highest rates in St. George-in-the-East, St. Saviour Southwark, St. George Southwark, St. Olave Southwark, Rotherhithe, and Woolwich. No fatal case of small-pox was registered in London during August. The 134 deaths referred to measles were 24 below the corrected average number in the corresponding periods of the ten preceding years; among the various sanitary areas this disease showed the highest proportional fatality in St. James Westminster, Shoreditch, St. George-in-the-East, Mile End Old Town, and Rotherhithe. The 69 fatal cases of scarlet fever were 19 below the corrected average number; this disease showed the highest proportional fatality in St. Luke and Whitechapel sanitary areas. The 204 deaths from diphtheria were 68 above the corrected average number; this disease showed the highest proportional fatality in Chelsea, St. Luke, Mile End Old Town, St. George Southwark, Newington, and Camberwell sanitary areas. The 128 fatal cases of whooping-cough very slightly exceeded the corrected average number; among the various sanitary areas this disease showed the highest proportional fatality in Westminster, St. Pancras, Rotherhithe, Greenwich, and Lee. The 46 deaths referred to enteric fever almost corresponded with the corrected average number; the mortality from this disease showed no marked excess in any of the sanitary areas. The 776 fatal cases of diarrhœa were 47 above the corrected average number; among the various sanitary areas this disease showed the highest proportional fatality in Clerkenwell, St. George-in-the-East, Poplar, St. Saviour Southwark, Newington, and Battersea. In conclusion, it may be stated that the mortality in London during August from these principal zymotic diseases was nearly 7 per cent. above the average.

Infant mortality in London, measured by the proportion of deaths of children under one year of age to births registered, was equal to 215 per 1000 during August, and slightly exceeded the average. Among the various sanitary areas the lowest rates of infant mortality were recorded in St. George Hanover-square, Westminster, Marylebone, Hampstead, Stoke Newington, St. Giles, and Bermondsey; and the highest rates in St. James Westminster, St. Martin-in-the-Fields, Limehouse, St. Saviour Southwark, Newington, and Woolwich.

THE SERVICES.

ARMY MEDICAL STAFF.

SURGEON-CAPTAIN FLEMING proceeds to Egypt from Poona for service with the Egyptian Army. Surgeon-Colonel H. Comerford, P.M.O., South-Eastern District at Dover, proceeds to Mandalay. Brigade-Surgeon-Lieutenant-Colonel W. F. Burnett, has been appointed Officiating Principal Medical Officer, Mandalay District and Chin Hills Command. Surgeon-Colonel M. Cogan, Principal Medical Officer, Belfast District, embarks for India. Surgeon-Captain J. Donaldson will shortly embark for Malta. Surgeon-Lieutenant E. S. Clark, M.B., will proceed to India. Surgeon-Lieutenant G. St. C. Thom will embark for Ceylon. Surgeon-Captain G. S. Walker and Surgeon-Lieutenant S. F. St. D. Green have embarked for Bombay. Surgeon-Colonel William T. Martin, M.D., and Surgeon-Lieutenant-Colonel Nathaniel McCreery retire on retired pay.

INDIA AND THE INDIAN MEDICAL SERVICES.

The services of the undermentioned officers of the Indian Medical Service (Madras) are placed temporarily at the disposal of the Government of Madras:—Surgeon-Major W. F. Thomas, Surgeon-Captain E. H. Wright. Surgeon-Captain W. G. Pridmore, and Surgeon-Captain J. L. Macrae. Surgeon-Major W. H. Neilson, (Madras), Medical Officer of the Erinpura Irregular Force, and Officiating Agency Surgeon in Alwar, is appointed to be Civil Surgeon of Bikanir. The services of Surgeon-Captain G. Bidie (Madras), are placed temporarily at the disposal of the Chief Commissioner of the Central Provinces. Surgeon-Colonel Henry Cook to be Surgeon-Major-General, vice Surgeon-Major-General P. S. Turnbull, M.D., retired. Brigade-Surgeon-Lieutenant-Colonel Thomas Ffrench-Mullen, M.D., Bengal Medical Establishment, is permitted to retire from the service subject to Her Majesty's approval.

NAVAL MEDICAL SERVICE.

Inspector-General of Hospitals and Fleets William Harris Lloyd, M.D., has been placed on the Retired List. Deputy Inspector-General Thomas Smith Burnett has been promoted to the rank of Inspector-General of Hospitals and Fleets. Fleet-Surgeon Thomas Bolster has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets. Surgeon Henry Stewart Archdall has been placed on the Retired List of his rank.

The following appointments are announced:—Staff Surgeons: A. M. French to the *Clyde*; W. Eames to the *Lion*. Surgeons: Richard C. Munday to the *Talbot* and F. E. Rock to the *Defiance*, additional, for temporary service; George Allan to the *Victory*, additional, for Portsmouth Dockyard; Vidal G. Thorpe to the *Wildfire*, additional, for Sheerness Dockyard; T. C. Meikle to the *Edinburgh*; W. G. Peck, M.B., to the *Victory*, additional, to be lent to the *Endymion* for voyage out and home; A. X. Lavertine to be lent to the *Nelson* for duty out and home; B. F. Parish to the *Bacon*; E. A. Penfold, M.B., to the *Pembroke*; and H. St. D. Griffiths to the *Vernon*.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Lieutenant-Colonel Duncan McFadyen, 2nd Battalion the Queen's Own Cameron Highlanders, to be Surgeon-Lieutenant-Colonel. Surgeon-Captain William Beddie, M.B., 1st Banff Volunteer Artillery (Southern Division, Royal Artillery), to be Surgeon-Major. Surgeon-Lieutenant James P. S. Ward, 2nd Devonshire Volunteer Artillery (Western Division, Royal Artillery), to be Surgeon-Lieutenant. Surgeon-Lieutenant Arthur Lloyd Jones, 3rd Volunteer Battalion the Welsh Regiment, to be Surgeon-Lieutenant.

VOLUNTEER CORPS.

Artillery: 1st Cornwall (Duke of Cornwall's—Western Division, Royal Artillery): Surgeon-Lieutenant J. A. Fox resigns his commission. 1st West Riding of Yorkshire (Western Division, Royal Artillery): Surgeon-Lieutenant J. Nightingale, M.B., to be Surgeon-Captain. *Rifle:* 1st Volunteer Battalion the Duke of Wellington's (West Riding Regiment): George Gardner Oakley, gent., to be Surgeon-Lieutenant.

THE WOUNDED ABOUT BULAWAYO.

Mr. Greenwood Sutcliffe, of St. Thomas's Hospital, who was sent out with Mr. Redpath by the English Red Cross Society to South Africa, has been attached to the field force operating in the district round Bulawayo during the last few months. In an interesting communication published in the *Times* of Sept. 8th Mr. Sutcliffe recounts some of his experience of the bullet wounds made by the enemy. It appears that the Matabeles are well armed with Martinis, Sniders, Lee-Metfords, Winchester, and elephant guns. The Martinis seem to do the most damage to the tissues. The few Lee-Metford wounds that have come under treatment have not been severe, the bullets having done little actual damage. In one case it is stated that a man was shot through the right lung, the bullet coming out through the scapula behind and making a clean cut which had completely healed in a week, and the man will be fit for duty again.

POONA.

There has been a good deal of sickness at Poona of late and during the past hot weather. A correspondent of the *Pioneer Mail* says that typhoid fever has been prevalent in "this most insanitary capital of the Deccan." The Ghorpuri barracks have long borne an evil reputation in this respect.

Nor was enteric fever the only disease at Poona, for small-pox and cholera have also visited the station. The latter fortunately only amounted to a small outbreak and is practically over now. Two field batteries which arrived at Kirkee from England in February last have been heavy sufferers from typhoid fever in spite of every precaution having been taken regarding the milk- and water-supplies of the troops. The appointment of a sanitary inspector at Poona and Kirkee, whose business it shall be to see that the cleanliness and practical hygiene of those stations are thoroughly carried out, is advocated.

THE RUMOURED PREVALENCE OF CHOLERA AT NAINI TAL.

The Anglo-Indian journals, in alluding to the recent death of General Sir William Elles after a few hours' illness from cholera at Naini Tal, take the opportunity of contradicting the truth of the rumours to which the occurrence had given rise. There is no cholera epidemic at Naini Tal. There have only been three cases of that disease among the Europeans and a very few sporadic cases among the natives at that station. There has, however, been a slight outbreak of cholera in the Jhansi district.

DEATHS IN THE SERVICES.

Surgeon-Major Herbert Saunders, A.M.S. at Murree, East Indies, on the 18th inst., aged forty-seven years. He joined the Army in 1880, and attained the rank of Surgeon-Major on July 31st, 1892.

Deputy Surgeon-General William John Palmer, M.D., Bengal Army (retired), on Aug. 26th, aged seventy.

The *Broad Arrow* states that some sixty executive officers of the Army Medical Staff stand to be relieved in India this trooping season, as they will have served a six years' foreign tour. Three administrative officers, Surgeon-Colonels Graves, Furguson, and Martin, will be returning home, also Surgeon-Colonel Cuffe, C.B., on promotion. Six medical officers and thirty privates, M.S.C., is Netley's contribution to the Aldershot manœuvres. The Netley Hospital has now only about one hundred patients. Our contemporary also states that a Moscow medical man is now on a visit to Netley, studying the working of the Hermite system. The P.M.O. and officers at the Royal Victoria Hospital are giving all necessary help to their guest.

Mr. George Bleeck Faskally, F.R.C.S. Edin., L.S.A. Lond., has been appointed Surgeon-Captain in the Medical Department of the Colonial Forces.

Correspondence.

"Audi alteram partem."

BACTERIOLOGY AND THE MEDICAL CURRICULUM.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Sept. 5th there is an article upon the position of bacteriology in medical education, in which you have pointed out the importance of a knowledge of the life-history of bacteria in the study of medicine and surgery, and the advantages which the student would gain by working for a short time in a bacteriological laboratory. I fully concur with every contention in your article, and I would lay especial stress upon the value which you attach to a practical laboratory course as forming a reliable groundwork to a knowledge of antiseptic surgery. You, Sirs, state that "the time has come when it should be insisted that every medical student shall receive not only some systematic instruction in the principles of bacteriology, but, more important still, shall be put through a thorough, if short, course of practical laboratory instruction, in which the theories propounded in the class-room may be clearly illustrated." You have not, however, laid down any definite plans by which your views can be carried into effect, and it is this question which I now wish to raise. It is quite true that many of the medical schools possess well-equipped laboratories in which every student, if he chooses, can receive systematic teaching. But this is not sufficient. My experience is that only the most earnest students attend these courses, while the majority do not avail themselves of the opportunities offered to them. The reason is not far to seek. The bulk of the students will only attend courses which are either compulsory or which will directly assist them in passing their examinations. They fear that they are wasting their time in working at subjects which will not directly "pay." I believe there are only two ways in which these objections can be overcome. The examining boards might (*a*) institute a separate examination in bacteriology, or (*b*) require candidates to be signed up for a course of instruction in the subject before presenting themselves for their final examinations. Now an increase in the number of examinations may not be desirable, and there are other reasons why the second plan is preferable. I would, therefore, suggest that the examining bodies take into consideration the advisability of making compulsory a course of bacteriology including practical laboratory work. I believe that three lectures a week, extending over a period of six or eight weeks, and three practical classes a week, extending over a period of one month, would give the student a thorough groundwork in the subject. The lectures should be well illustrated by cultivations and apparatus, and the practical course should be taken before the student becomes a dresser in the surgical wards. There would be no difficulty in instituting such courses at any medical school, and at many it would merely be a question of providing accommodation for a larger number of students in the already existing classes. In conclusion, I feel sure that everyone seriously interested in medical education will be grateful to you, Sirs, for calling attention to such an important question.

I am, Sirs, yours faithfully,

Trinity-square, S.E., Sept. 8th, 1896. J. W. WASHBOURN.

COMMERCIAL IMMORALITY: A DISCLAIMER.

To the Editors of THE LANCET.

SIRS,—I have just received a book of advertisements of an American nostrum called "Sanmetto." To my astonishment I find my own name appended to a most objectionable testimonial in favour of this drug. I have never used it and need hardly say that I have never given any testimonial for it. I ask you kindly to publish this disclaimer at once and to give your advice as to what legal remedy I have against this abominable proceeding.

I am, Sirs, yours faithfully,

Nottingham, Sept. 3rd, 1896. W. B. RANSOM.

*** We learn that Dr. Ransom has placed the case in the hands of the Medical Defence Union.—ED. L.

HOMES FOR PHTHISICAL PATIENTS IN SCOTLAND.

To the Editors of THE LANCET.

SIRS,—My name is very prominently alluded to in the article for Scotland in THE LANCET of Aug. 29th by your "own correspondent" as one approving *in toto* both of Mr. Quarrier's scheme for hospitals for phthisical patients and of "the methods which have been so far adopted by its promoters." Would you allow me to explain in a single sentence how far this is and is not the case? I have the greatest possible regard, and, indeed, admiration, for Mr. Quarrier, and am so much in sympathy with his objects that I was some time ago specially invited by his agent to nominate a medical committee of consultation to advise with him as to all details and principles where medical knowledge could be of use. That committee has met, I think, once only, and it has become so evident to me (and I suppose to others) that it is entirely ignored in matters of moment already done and to be done that only my regard for Mr. Quarrier has hitherto averted a public protest and a demand for the committee to be formally released from duty. When, therefore, THE LANCET attributes to me the "favourable opinion" above referred to, I feel bound to explain that the committee are not to be taken as being in any sense responsible for matters that have never been brought under their cognisance.

I am, Sirs, yours faithfully,

Glasgow, Aug. 29th, 1896. W. T. GAIRDNER.

"THE GENERAL MEDICAL COUNCIL: CRITICS AND CANDIDATES."

To the Editors of THE LANCET.

SIRS,—For one reader who is interested in the personal matters arising out of the exact language used by one or other of your distinguished correspondents, Mr. R. B. Carter and Professor Victor Horsley, there are probably a dozen who are anxious to get to the root of the subject and to know where truth—"that many-sided crystal"—lies. It is certainly amazing that after nearly forty years of existence the powers and duties of the General Medical Council should still be open to doubt, and this fact alone tends to show that there has in the past been a lamentable want of independence of thought on the part of members of the Council, in spite of the array of eminent names paraded by Mr. Carter. It is clear that hitherto the Council has practically delegated all matters relating to the internal discipline of the profession to its President for the time being, who in turn is governed in his decision by the permanent officials and the lawyers. The present legal advisers of the Council are not likely to alter their views, and the only way to settle the true interpretation of the Act is to bring a test case before one of the higher tribunals. It is impossible for anyone to deny that the Council is out of harmony with the profession with which it has to deal, and also that this want of harmony is due to its non-representative character. The "governing classes" are undoubtedly under the delusion that the Council represents the profession because it represents the various licensing bodies. The first step, therefore, is to see that the profession *is* represented on the respective Councils of these, when further direct representation on the General Medical Council will be unnecessary. The battle cry at the approaching election should be "Corporate Reform."

I am, Sirs, yours faithfully,

Sept. 7th, 1896. W. G. DICKINSON.

To the Editors of THE LANCET.

SIRS,—Mr. Brudenell Carter is evidently of opinion that the art of controversial writing consists in ignoring the arguments of opponents and in introducing personalities to confuse the issue. In this art he is a master and no one will desire to dispute his pre-eminence. In accordance with his art, in answering my letter of the 11th inst. he refrains from attempting to answer the charges that I made against the General Medical Council—which are, indeed, unanswerable. His discretion is to be admired, but he has attempted a too well-known device when he requests me "to point out any omission (of duty), explaining, of course, in what way and by what authority the neglected duty was imposed upon us." I cannot repeat in detail my letter, so I beg to refer him to it for the information that he requires, as well as to the paper that I read at Carlisle which is published in the *British Medical Journal* of yesterday's date. He further asks me to give out of my abundance one example of a wasted opportunity on the part of the Council since he became a member of that august body. As a matter of fact, I gave two glaring examples in my letter, the first of which was the conduct of the Council in the matter of the medical aid associations question, and the second the action of the Council with respect to the Obstetrical Society's diploma. I also pointed out that for various reasons—no doubt sufficient for the Council, but quite insufficient to satisfy the outside world—the Council has never attempted to establish the one-portal system of medical examinations. I have other cases of wasted opportunities in reserve, but I shall for the present add only one to the list given above. The Council for years did nothing but attend to corporation interests, and was so manifestly out of touch with the medical profession that direct representation was granted by the Medical Act of 1886. The result of this has been made evident by an increase in the efficiency of the Council. Valuable and useful reforms, which before the Act was passed had no chance of being carried, have been effected mainly by the perseverance and determination of our direct representatives. Such useful work as the extension of the curriculum to five years, the improvement in the preliminary examinations, the increased requirements of the Council in the matter of medical examinations, the improvement in the education of the student in midwifery, the stigmatising of "covering" as infamous, the recent more energetic actions of the Council in enforcing Section 29 of the Medical Act of 1858, and the still more recent determination of the Council to enforce Section 40, is all subsequent to 1886. Although in a minority our direct representatives—notably Dr. Glover—have been able to effect useful reforms, notwithstanding the opposition which has always been made by the reactionary members of the Council, among the most determined of whom we may place the name of Mr. Brudenell Carter.

The improvement in the efficiency of the Council which resulted from the introduction of the principle of direct representation was so marked that in 1890 the British Medical Association at its annual general meeting determined to apply to the Council for the additional number of direct representatives provided for in the Act of 1886, and in compliance with a formal request from the council of that Association Sir Walter Foster gave an opportunity to the General Medical Council to comply with the wishes of the medical profession by moving that the Council should take the necessary steps (as detailed in Section 10, Subsection 1, Paragraph C of the Medical Act, 1886) to confer upon the registered practitioners of the United Kingdom the power of returning an increased number of direct representatives. This motion was seconded by Dr. Glover. It is perhaps unnecessary to state that this opportunity was not taken advantage of by the Council, which, on the motion of Sir Dyce Duckworth, passed to the next order of the day. In the course of the debate Mr. Carter asserted that the very principle of direct representation was irrational, and the movement in favour of it utterly spurious. No better argument was urged against Sir Walter Foster's resolution than these characteristic utterances of Mr. Carter. In November, 1891, the Council received a further communication from the British Medical Association urging an increase in the number of direct representatives. This communication was entered upon the minutes, and Dr. Struthers expressed a hope that next time the Association would write more courteously. On Nov. 25th, 1891, Sir Walter Foster proposed a resolution similar to his former one, and the Council rejected it, only five hands being held up in its favour. Reasoned arguments against his proposal were again conspicuous by their absence. Sir W. Turner hinted that Sir Walter Foster's resolution was an electioneering manœuvre and could not see what the hardships or struggles of the medical profession had to do with the Council. Sir Dyce Duckworth said that the demand for increased representation was utterly unnecessary and that there was no genuine desire for it. Dr. Atthill denied that any claim for increased representation could be based on the ground of taxation. The tax was paid by the student's parents. (This childish plea, which has been repeated by Dr. Wilks and others, has been contradicted by the President himself, who in his presidential address in November, 1895, spoke of the medical profession as paying an inclusive fee of £5.) Sir John Simon thought that the Council should protect itself from such frivolous and absurd debates, while Mr. Carter maintained that no demand had been made for an increase. Dr. MacAlister made the astounding assertion that he stood there as a direct representative, apparently under the impression that this term includes the nominees of universities. Dr. Leech, on the other hand, asserted that the Council would be strengthened by an increase in direct representation. Dr. Glover's excellent speech is deserving of quotation. He said "that the Council had offered the most steady and unbroken resistance to the entrance of direct representatives, and it would be too sanguine to suppose that they would now belie that conduct and vote for an extension. He agreed with Dr. Leech that for all the purposes for which it existed it had been materially strengthened by the advent of the direct representatives. Too many members were out of touch with the interests and requirements of the medical profession. One of them had had to ask what was the nature and form of such a thing as a death certificate. Another boasted that he had never attended a labour, and yet they pretended to be in touch with the profession."

Again, on Nov. 24th, 1892, Sir Walter Foster again brought forward his resolution. He was met with the remark that the time of the Council should not be taken up in such idle discussion, and his resolution was lost by 16 votes to 8. Again on Nov. 30th, 1895, Sir Walter Foster asked the Council to consider the resolution of the British Medical Association urging an increase in direct representation. Dr. MacAlister said that the resolution of the Association was a pistol held at the head of the Council, and that it

would be undignified for the Council to yield. The only answer they could possibly give was, Let them go to Parliament. Mr. Carter said it was a wholly new doctrine that the Council owed any responsibilities to the British Medical Association, which is the representative association of the medical profession. Finally, Sir Walter Foster's motion was lost by 20 votes to 7. It will be of use to give the names of those who formed the minority and who voted in the interests of the medical profession as opposed to those of the corporation. For the resolution were Dr. Glover, Mr. Wheelhouse, Sir W. Foster, Dr. Bruce, Dr. McVail, Dr. Philipson, and Dr. Leech. Dr. Haughton, Dr. Kidd, and Sir Dyce Duckworth were absent.

The Council has thus wasted every opportunity afforded it to introduce reform in its own constitution from within. Consistent to its old traditions, it has with pigheaded obstinacy refused to listen to these just and reasonable proposals. Reform will come in due time, but from without, and a Council will then be substituted for the present one, which will be able to rise above its own selfish ends and take a wider grasp of the meaning of the word duty. Anyone who has the courage to wade through the dreary record of the Council's inefficiency cannot fail to be struck with the inconsistent and contradictory views expressed by the members of that body as to the functions of the Council and the provisions of the Medical Acts. It is, therefore, not surprising that apologists for the Council should come forward, as Mr. Carter has done, with inaccurate and contradictory interpretations of the Acts, or that they should take credit for reforms which have been forced out of them by the persevering action of our direct representatives. Unfortunately, so long as the Council is composed of reactionaries of the type of Mr. Carter, it may be expected to vote steadily and consistently against every measure of reform.

To turn now to the rest of Mr. Carter's letter, it is extraordinary that he should gravely put forward, as if it were a line of sound argument, a series of names of distinguished men who for the most part died before 1886, and who flourished at a time when the General Council did but little to deserve the praises of those whose interests were placed in its hands. Without any disrespect to their memory, it is plain that Mr. Carter, having no better course to follow, was, in Tennyson's words, obliged to

"Fall back upon a name! rest, rot in that."

Finally, I must draw attention to the last paragraph of his letter, in which he now admits that he has read the Medical Acts. This statement places Mr. Carter in a very serious position, for whereas, in company I suppose, with everyone else, I thought that his omissions in his letter of Aug. 8th of all reference to Sections 40, &c., &c., and his denial that the Act of 1858 contained any such powers were only due to simple ignorance, it would now appear as if the facts were purposely concealed. It is not only impossible to see how he can escape from this dilemma, but it is also regrettable to see that he is carried by his "ease of phrase" yet more deeply into the mire of misrepresentation, since he tells us that "our lawyers"—i.e., of the Council—do not accept my interpretation of the Acts. If Mr. Carter in this matter spoke truly how comes it that the selfsame lawyers have put into execution Section 40 in certainly two cases, and in precise accord with my reading of the Acts?

I am, Sirs, yours faithfully,

A. G. WELSFORD.

Cambridge-terrace, Dover, Aug. 30th, 1896.

"DIRECT REPRESENTATIVES ON THE GENERAL MEDICAL COUNCIL."

To the Editors of THE LANCET.

SIRS,—It seems to me that the time has arrived for careful criticism of the qualifications of the several candidates and their fitness or not to represent the profession on the General Medical Council.

In the first place I desire to point out that every candidate gives a prominent place in his address to the question of the registration of "midwives," "midwifery nurses," or of "all nurses." Mr. George Brown's paper, the *Medical Times and Hospital Gazette*, contains an article under date May 18th, 1895, in which a scheme is sketched for an elaborate training of obstetric nurses. It proposes three years in a general hospital, at least three months in a lying-in hospital, and nine months' additional training in a hospital for women or a lying-in hospital or attendance upon midwifery cases under a medical man, and evidence of having attended not less than thirty cases of labour, (I presume on her own account). This curriculum completed, she is to appear before a board of examiners for examination in elementary anatomy, hygiene, general nursing, and ordinary midwifery. I see from a lay paper — the *Nursing Record* — that Mr. Brown's co-editor, Dr. Bedford Fenwick, gives lectures to nurses on elementary physiology.[1] Further on in the same article we read: "It appears to us that the consequence would be that many medical men would gladly employ nurses so efficiently trained for attendance upon their poor and parish patients, knowing that such parturient women would therefore receive every care and attention, and that in the event of any abnormality showing itself medical assistance would be immediately summoned." Dr. Dolan, in the *Scalpel* for August, 1896, states on page 257, first, that he should support a scheme for the registration of "all nurses" who have had three years' training, and immediately after that midwives should have three years' training. This seems to me an illogical position to take up seeing that these two gentlemen have affected the most strenuous opposition to any legal registration of "midwives." We have been told that the Council of the Incorporated Medical Practitioners' Association, after taking the opinion of the members of the Association, have adopted these two gentlemen, and also Dr. Rentoul, as the candidates they advise should have the support of the profession during the present contest. It seems a little curious to me that Dr. Dolan and Dr. Rentoul should have been selected to represent the Association seeing they were only elected members on Aug. 12th.

The most astounding development, however, is the implied extraordinary change of front of Dr. Rentoul upon the "midwives question" indicated in the leader in Mr. George Brown's paper of Saturday last. The editors, in criticising Dr. Rentoul's Bill "For the protection of pregnant and lying-in women and newly-born infants, by providing for the better training of persons as obstetric nurses and for their supervision and compulsory registration as such," after expressing their admiration of the measure as being "an immense improvement" on anything of the kind produced, say, "In these columns we have on previous occasions pointed out that medical men, by employing such obstetric nurses, would save themselves an infinity of time and trouble, and that they would be relieved of the anxiety which so many cases at present cause them by being enabled to leave the patient in care of such a nurse, knowing that if any difficulty arose their presence would be immediately summoned." Again, they say "Dr. Rentoul's Bill possesses this great improvement over the measures drafted by the British Medical Association that from the first line to the last it is made perfectly clear that nurses only are dealt with, and that they do not mean, as they mean in other measures alluded to, midwives under a new and misleading title." These gentlemen boldly propose to legalise a new class of half-educated, partially-trained medical (!) women, and advise that they shall be employed by medical men to watch a most dangerous and difficult class of cases and to have a free hand to determine whether or not the presence of a duly qualified medical practitioner is necessary—in short, to define what is "natural labour." Are we, then, not to have the unqualified male assistant reinstated, many of whom have had a full course of medical study? I pointed out to the Council of the "Incorporated" last year that this is not control but covering. It is directly antagonistic to the opinion with regard to the employment of unqualified assistants expressed by the General Medical Council and endorsed by the profession. The amazing reply of the editor of the *Medical Times and Hospital Gazette* to this contention is that covering is only applicable if the person covered is represented to be a duly qualified medical practitioner. There may be a difference of opinion as to the letter of the resolutions of the General Medical Council, but there can be none as to the spirit. The fourth candidate is Dr. Alderson, whose attention has been officially drawn to this question by myself, and he has declined to formally disavow the suggested use of these obstetric nurses.

Being familiar with these facts I should consider myself

[1] Nursing Record, p. 63, July 25th, 1896.

most blameworthy were I not to communicate them to the profession through the medical press.

I am, Sirs, faithfully yours,

Aug. 31st, 1896. JAMES BRASSEY BRIERLEY.

To the Editors of THE LANCET.

SIRS,—I beg to inform you that at a special general meeting of the Preston Medico-Ethical Society, held on Thursday evening, Sept. 3rd, the following resolution was passed by a majority: "That the Preston Medico-Ethical Society, recognising the valuable services rendered to the medical profession by Dr. R. R. Rentoul, heartily approves of his candidature and assures him of its support in his efforts to become a direct representative on the General Medical Council." I am, Sirs, yours faithfully,

W. H. IRVIN SELLERS, Hon. Sec.

Chapel-street, Preston, Sept. 4th, 1896.

To the Editors of THE LANCET.

SIRS,—A resolution in favour of the candidature of Dr. Rentoul of Liverpool for a seat on the General Medical Council was proposed, seconded, and passed by the Medico-Ethical Society of Preston on the 3rd day of September, 1896. It may be of interest to some of your readers to know that out of a membership of nearly sixty only eighteen were present at this specially convened meeting, that ten voted for him, seven against him, and one did not vote at all. He thus had a majority of three. I have written this in order that no one may be misled as to the greatness of the majority.

I am, Sirs, yours faithfully,

Preston, Sept. 4th, 1896. CHARLES RIGBY, M.B. Aberd.

To the Editors of THE LANCET.

SIRS,—At a meeting of medical practitioners held at Liverpool on Sept. 1st, it was unanimously agreed that a General Committee, with power to form a small Executive Committee, should be formed to forward the candidature of Dr. R. R. Rentoul for the General Medical Council. Over one hundred local practitioners have already joined the General Committee. Those wishing to join the committee should forward their names to me at the earliest convenience.

I am, Sirs, yours truly,

Sept. 2nd, 1896. W. J. ROBERTSON DUNN, Hon. Sec.

To the Editors of THE LANCET.

SIRS,—A meeting of the profession in this district will be held under the auspices of the Manchester Medico-Ethical Association in the Albert Memorial Hall, Albert-square, Manchester, on Thursday evening, Sept. 17th, 1896, for the purposes of giving *all the candidates* for seats on the General Medical Council an opportunity of placing their views before their constituents. No resolution committing the meeting to support any one candidate or any set of candidates will be proposed, and although this circular will be distributed only in a limited area the committee are desirous that as many members of the profession as can make it convenient to be present will do so, and further hope that those receiving this notice will make the meeting known to as many as they possibly can, and for this object due notice will also be given in the medical journals. The chair will be taken by Mr. James Taylor of Chester at 7 o'clock precisely. Each candidate will be allowed a quarter of an hour for his address, and no question must be put from the audience until all the candidates have spoken, when questions, plainly written on forms which will be supplied, may be put.

The following candidates have intimated their intention of addressing the meeting:—Dr. J. G. Glover (London), Dr. Dolan (Halifax), Mr. George Brown (London), Dr. R. R. Rentoul (Liverpool), Dr. Sam. Woodcock (Manchester), Dr. Alderson (London), and Dr. Lovell Drage (Hatfield, Herts).

I am, Sirs, yours faithfully,

Manchester, Sept. 5th, 1896. JAMES HOLMES, Hon. Sec.

THE DRAINAGE OF CHICHESTER.

To the Editors of THE LANCET.

SIRS,—With reference to an annotation in THE LANCET of Aug. 29th on the drainage of Chichester the following facts may be of interest to you. 1. Up to last night 99 cases of typhoid fever have been notified since April 27th last, but perhaps it would be more true to say 98 cases since May 24th. 2. A very great proportion of these cases (in fact nearly all) have occurred in those parts of the city which have in the past periodically suffered from these attacks. 3. The districts in which the outbreak has arisen are principally inhabited by the working class and the cases have occurred, generally speaking, among the poorest of this class. 4. The city has recently been sewered at a very heavy cost. 5. It has also water, supplied by a company, of excellent quality and pureness, as revealed by a report by Dr. Klein so recently as July 31st, 1896. 6. About half the houses of the city are now connected with the sewer and about the same proportion take the company's water. Some few, however are drained and yet continue to take their water from wells, in close proximity to cesspools or privy pits. 7. In the districts where the outbreak has occurred privy pits are in general use (except where the houses are connected with the sewer). Having visited myself most of the invaded houses I can testify that many of them are of a very offensive character. 8. The number of houses invaded is sixty-nine; of this only thirteen are both drained and use the company's water. The remainder are either not drained or are, if drained, still using their well water. 9. Nor is this all; a very considerable proportion of those thirteen houses which are both drained and have the company's water in use are in the closest proximity to other very insanitary dwellings, as the following extract from a report I made to Dr. Bulstrode will show. In both the following cases they were drained and used company's water. "Case of Ide, No. 9, Cross-street, in which eight cases of typhoid fever occurred. This house, although drained itself, has near the back door a disgusting privy pit belonging to a house with a long garden in High-street. This privy was in an abominable condition; often before being used the tenant of the house was compelled to take out the sewage with a bucket (to make room) and bury it. The stench from this place was fearful and caused a great nuisance to the Ides." "Case of Burns, 2, Infirmary-terrace." In the early spring during heavy rain this house was flooded with sewage from privy of adjoining premises, which sewage had to be swept out with a broom; this privy forms part of the wall of the passage of Burns' house, and sewage is still soaking through." (The defects in the sanitary arrangements of the adjoining houses are now rectified, of course.) 10. From the bitterness of the fight on the sewerage question I knew that the outbreak would cause considerable uneasiness in the minds of the opponents of the sewerage system, so I wrote to the Local Government Board desiring them to make an independent investigation into the cause of the outbreak, and Dr. Bulstrode is now fully investigating all circumstances connected therewith. Without for a moment anticipating his report, the following extract from his recommendations to the urban sanitary authority will speak for itself: "Use should be made of the house-to-house inspection to impress, where necessary, upon the inhabitants the desirability of adopting the water-carriage system of excrement disposal, and in cases where this system is or has been adopted the disused privies should be thoroughly cleaned out and the brickwork lining them removed. In no case should the privy be filled up while it still contains excrement." 12. From a medical aspect it might be interesting to you to know that thus far we have only had one death from the disease, besides one suicide during the delirium occasioned by the fever. Doubtless the mortality has been greatly lessened by the great effort made by the medical men in getting the cases removed to the infirmaries or hospital and to the excellent nursing provided by the authorities.

I am, Sirs, yours faithfully,

E. PRIOR,

Mayor of Chichester; also Chairman of Board of Guardians.

Chichester, Sept. 2nd, 1896.

To the Editors of THE LANCET.

SIRS,—In your remarks on Mr. Bostock's letter on the Chichester drainage you say that evidence is required as to whether the present outbreak of enteric fever arises from the new drainage or from the results of previous want of it. A walk through the streets over the new gratings which have been inserted in the pavements where the house connections have been made affords ample evidence that an abominable smell comes up through these gratings, and one of the gratings is in front of an open shop, in which house there have been two cases of fever (one clearly enteric),

and this in one of the principal streets. I have no property in Chichester, but reside in its neighbourhood; and the ladies of my family now avoid driving into the city as much as possible, as the evidence of their senses has convinced them that the drainage has resulted in foul the odours from which the streets were free formerly. In report of Mr. Hawksley, C.E. (dated 1867), while advocating the establishment of waterworks, (which have since been erected) he says: "The houses very generally drain into cesspools, not unfrequently placed a few yards, and in some instances only a few feet, from the wells. Very usually, however, the wells appear to have been sunk into a stratum below that in which the cesspools are situated and from which *it is separated by an impervious bed of marl*. To this fortunate circumstance is to be attributed the fact that although the water of some wells is undoubtedly polluted to a most disagreeable extent, and probably of many to a less obvious degree, yet that in general the water used by the inhabitants is free from any objectionable ingredients, and is clearly not injurious to health." It is owing to the very peculiar nature of the subsoil that the (*foreseen*) difficulties in the drainage have arisen, and this in the opinion of many made the drainage not only unnecessary but dangerous and justified what at first sight naturally seemed unjustifiable opposition.

Mr. Hawksley's report further says: "I am bound to express my decided conviction and conclusion that Chichester has been unjustifiably charged with being an unhealthy and uncleanly city ..... I am now enabled to report that, in my opinion, the intended drainage of the city may be postponed at all events for some years if a competent supply of water be promptly introduced. ..... In the meanwhile the open strata on which Chichester is built will continue to carry away the subsoil liquids as they have hitherto done." The population of Chichester has not materially increased during the last thirty years. The recent drought has been favourable to the new system rather than otherwise, and the general conditions are unchanged, so that with evil odours arising from the new work and fever in parts which have been free from it in the past there seems to be some evidence that the present outbreak arises necessarily from the drainage or from the manner in which it has been carried out. Such, at least, is the opinion of many besides Mr. Bostock, and it is to be hoped that something in mitigation at least of present evils may result from the matter having been named in your columns.—I remain, Sirs, your obedient servant,

Sept. 2nd, 1896. A COUNTRY MOUSE.

ST. ANDREWS UNIVERSITY MEDICAL SCHOOL.

To the Editors of THE LANCET.

SIRS,—Lest students should be misled in making their arrangements for next session it is necessary to point out that as the medical ordinances for St. Andrews University have not yet been passed the newly appointed lecturers on Anatomy and Materia Medica will not at present be able to give qualifying courses of lectures.

I am, Sirs, yours truly,

Dundee, Sept. 7th, 1896. R. C. BUIST, M.D. Edin.

DIRECT REPRESENTATION FOR SCOTLAND.

To the Editors of THE LANCET.

SIRS,—My name having been put forward in several of the medical journals in connexion with the Direct Representation of the medical profession in Scotland in the General Medical Council, I have received numerous letters requesting my views on the chief questions presently engaging the professional mind. Will you, therefore, kindly accord to me the privilege of offering, through the medium of your columns, to the profession in Scotland the following epitome of the opinions which I entertain on these questions:—

1. I am opposed to the formation of any new order of practitioners, either male or female. I am of opinion that as matters stand at present we have too many orders, and that these might, with benefit to the profession and to the public be reduced to two: (*a*) an order legalised to practise medicine and surgery by a State examination, all the present corporations being extinguished as examining bodies; (*b*) an order possessing the State qualification, with the voluntary addition of a university degree, the degree granting power of the universities being left undisturbed. The University of St. Andrews should be made the university of all the extra-mural schools and colleges in Scotland, and the M.D. degree should be thus attainable by the students of those schools.

2. No "lying-in" woman should want for proper medical attendance in urgent cases. Of this requirement any well-trained nurse is capable of judging. The attendance should be obtained, in Scotland, through the county councils, and the remuneration for such services should come from the public rates.

3. I am of opinion that no unqualified person should be permitted to practise medicine or surgery for gain, and that as the law at present stands the ignorant public are not sufficiently protected against imposition. In this respect amendment of the law is imperatively required.

4. I am of opinion that the medical profession, as a whole, is not adequately represented in the General Medical Council, and that the selfish interests of the universities and corporations promiscuously eclipse the just interests of the practitioners.

5. Our State hospitals (in Scotland our Poor-law hospitals) should be available for the purposes of medical instruction. I fail to see why all clinical instruction required by the medical student should not be obtained in this manner, and thus the specious excuse for the excessive and demoralising work in connexion with hospitals would lose much of its validity.

6. My considerable experience of medical students satisfies me that at present the preliminary examination is ostensibly sufficiently stringent; that the medical curriculum is absurdly overcrowded with subjects of little practical value in medical or surgical practice; and that it should be reconstructed, at least to the extent of putting the subjects of chemistry (which should be limited to the principles of the science and the chemistry of living bodies), zoology, and botany into the preliminary examination.

7. I hold that it is perfectly competent for the poorer sections of the public to coöperate so as to command the best available medical and surgical skill, while it is equally wrong in principle and unjust to the medical profession that the affluent should be able to command the same inadequate terms as the artisan class under the club system. I consider it highly improper that any qualified practitioner should so lend himself that greedy and unscrupulous laymen can make a profit out of his labour for their own selfish ends, but that at the same time it is *ultra vires* of any section of the profession to dictate to any qualified medical practitioner on what terms or for what rate of remuneration he should accept a club appointment. The law of supply and demand and the liberty of the individual should be operative here as elsewhere.

8. I am distinctly of opinion that professorships in our universities and hospital appointments should be obtained, as in France, through competitive examination, and not as the result of political juggling and mean and unworthy social machinations. Gross scandals in our university and hospital systems would be thus impossible, and further that the tenure of hospital appointments should be more limited than at present, and that generally speaking they should be more fairly distributed to the profession.

If these views accord with those of the majority of the profession in Scotland, and if I am otherwise deemed suitable for the undoubtedly honourable office of Direct Representative for Scotland in the General Medical Council, my services are at the disposal of my professional brethren, and I shall honestly exert myself as I have hitherto done in the interests of justice to all and the uprooting of injustice and oppression no matter in what quarter.

I am, Sirs, yours faithfully,

D. CAMPBELL BLACK, M.D. Glasg., F.R.S. Edin.,
Professor of Physiology, Anderson's College Medical School.
Glasgow, Sept. 7th, 1896.

MEDICAL AID SOCIETIES.

To the Editors of THE LANCET.

SIRS,—In consequence of a discussion taken part in by all the medical practitioners of this district, we, the undersigned, desire to say that after Sept. 29th, 1896, the appointment of medical officer to any insurance medical aid society will not be held by any of us. We believe that the Watford and Bushey Provident Sick Club meets all the requirements

of the class who use these means to provide against illness; this club will allow each subscriber to retain his or her present medical attendant.

(Signed) F. HAYCRAFT BERRY, M.D., &c.
J. BUCHANAN, M.B., &c.
J. D. BURNETT, M.B., &c.
ALFRED E. COX, M.R.C.S., L.R.C.P.
C. HERBERT HALL, M.B., &c.
ARTHUR KING, M.D., &c.
A. LESTOCK REID, M.R.C.S., L.R.C.P.
H. A. RUDYARD, M.R.C.S., L.R.C.P.
ROBERT A. ST. LEGER, M.B., &c.
WM. W. SHACKLETON, M.B., &c.
G. FRANCIS SMITH, M.R.C.S., L.R.C.P.
ARTHUR STRADLING, M.R.C.S., &c.

"A NEW STONE-SEARCHER."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Aug. 29th the above is described by Dr. Kane of New York. Although acknowledging its ingenuity it is only just to myself to claim priority for originality of idea. In a letter to you, December, 1892, I referred to a sound the beak of which could be hinged on the shaft allowing of varying adjustments for the investigation of prostatic growths. Shortly afterwards I found another use for it—viz., that by a longish beak set in the bladder at a rectangular or acute angular position it would search out those stones inaccessible to ordinary sounds. I have no further printed proofs of my priority and am free to say Dr. Kane's sound may be better.

I am, Sirs, your obedient servant,

Finsbury-pavement, E.C., Aug. 29th, 1896. JAMES MACMUNN.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

Relaxation of the Dogs Muzzling Order.

DR. HOPE has submitted a report to the Health Committee embodying a series of regulations which he thought might be substituted for the existing ones made under the muzzling order. Amongst other things he suggested that the name and address of the owner of each dog should be placed on the collar and also that an official metal tablet bearing a registration number should be attached to the collar. The chairman considered that the suggestions contained in the report would meet many of the objections the public and owners of dogs urged against the muzzle. Some members of the committee objected to the registration proposed. The report was eventually adopted, with the exception of the clause relating to registration.

Remuneration of Liverpool Police Surgeons.

The recent report of the Head Constable on the supply of drugs to the police and the remuneration of divisional surgeons has now been printed and published in pamphlet form. The report states that the surgeons are paid about £70 per annum and find their own drugs, &c. The average number of men under their charge is 283, so that they receive about 5*s.* per man per year. Drugs cost about 1*s.* per man. This rate compares with 10*s.* per man in the Bootle force and 8*s.* 6*d.* per man in the Liverpool Post Office. The system of paying equal salaries is shown to be very unfair, as the number of men in some divisions being greater than in others the increased expenditure on drugs and locomotion decides that the heavier the duties the lesser the net remuneration. The surgeons desire to be relieved of the cost of providing drugs and to receive a slight increase of salary in the case of the more numerous divisions, the total cost of the alteration being estimated at £165 per annum.

Health of Liverpool.

The medical officer of health's report states that 510 births were registered in the city during the week ending Aug. 29th, representing a birth-rate equal to 33·2 annually per 1000 of the population. The deaths registered in the city during the same period amounted to 237, making a rate of total mortality equal to 19·2 annually per 1000 of the population. Of the deaths, 50 occurred in public institutions devoted to the treatment of the sick, and of the total deaths 97 were of children below five years of age, and of these 69 were infants below one year of age. The patients under treatment in the city infectious hospitals on the 3rd inst. numbered 375, as compared with 358 on the previous Thursday. Of these 272 were suffering from scarlet fever, 66 from typhoid fever, 19 from typhus fever, and 1 from small-pox.

The British Association.

The meeting of the British Association in Liverpool next week is looked forward to with much interest. The medical profession are not behindhand in helping to make it a success. The President and members of the Liverpool Medical Institution have arranged a banquet in honour of Sir Joseph Lister, to take place on Saturday, Sept. 19th, at which over 100 distinguished guests are expected to be present.

Medical Faculty of University College, Liverpool.

The annual prospectus of the medical faculty of University College has just been issued. Amongst other useful information it will be noted that students will now be able to avail themselves of the practice of the Ladies' Charity and Lying-in Hospital, where more than 2000 labours are attended yearly. This is most satisfactory, and is no doubt an outcome of the recent dispute between the staff and the managers of the above charity. The distribution of prizes and certificates will take place on Oct. 10th. The opening address will be given by Sir William O. Priestley, M.P.

Sudden Death of Dr. John Harvey.

The many friends and colleagues of the late Dr. John Harvey at the Royal Infirmary, where he was a great favourite, received a painful shock on receipt of the news of his death, which took place at Fairfield on Sunday night after a few hours' illness. The deceased up to the time of his death was surgical tutor at the Royal Infirmary, an office which he filled with much credit to himself. His previous appointments at the Royal Infirmary comprised the posts of house physician and house surgeon. He was a Bachelor of Medicine of the London University and a Member of the Royal College of Surgeons of England. The flags at the Royal Infirmary and at the Liverpool Medical Institution, of which latter he was also a member, floated at half-mast out of respect to his memory. He was thirty-three years of age and unmarried.

Sept. 8th.

WESTERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

The Torquay Water-supply.

THE Torquay town council on Sept. 3rd authorised the promotion of a Bill in Parliament for the purchase of the valley on Dartmoor from which the town obtains its water-supply, at an estimated expenditure of £40,000. It is proposed to remove all farms and dwellings from the watershed and to lay the land down to pasturage.

"Pegging away at the Doctor."

At the meeting of the Barton Regis board of guardians, held on Sept. 4th, a member complained of the time that people had to wait at the workhouse who wanted to see the medical officer, and proposed that the Board should fix a certain time for his attendance. The chairman (Major Rumsey) said there was a time and the medical officer had attended punctually for years. They must remember that they did not pay for the whole services of the medical officer. He condemned "the weekly pegging away at the doctor." It was neither respectful to the officer nor dignified in themselves. When they had a real ground for complaint he would support them, but it seemed very unreasonable that they should worry the medical officer in the way they were doing. The resolution was put and lost by a large majority, owing to the exceedingly sensible remarks of the chairman, and it is to be hoped that the minority will profit by them.

The late Epidemic of Small-pox at Gloucester.

Aug. 30th was observed in the Gloucester churches as a day of special thanksgiving for cessation of the small-pox epidemic. At the cathedral portions of the "Hymn of Praise" were sung and the service closed with a solemn *Te Deum*.

A Mark of Sympathy with Dr. and Mrs. Coghill of Ventnor.

A handsome stained glass window has been recently erected in St. Catherine's Church, Ventnor, to perpetuate the memory of Kenneth Sinclair Coghill, who fell in the battle of Krügersdorp. The window was subscribed as a mark of sympathy with Dr. and Mrs. Coghill on the loss of their son, whose death was much regretted in Ventnor, and as a record of his bravery, to which many of Dr. Jameson's officers and troopers have borne testimony. A tablet bears the following inscription: "In memory of Kenneth McKay Sinclair Coghill, third son of Dr. and Mrs. Coghill, late of Edinburgh; born at Ventnor on the 10th of May, 1876, killed in action at Krügersdorp, January 1st, 1896, this window is erected by friends and fellow-townsmen."

Serious Charge against a Medical Man at Swansea.

Timothy Siddall Jones, M.D. Aberd., of Swansea, and Henry Richards, a medical student, were charged at the local police-court on Aug. 25th, on a coroner's warrant, with the manslaughter of a single woman aged twenty-three years, whose death is alleged to have resulted from an illegal operation. Mr. J. G. Hall, the presiding magistrate, a medical man, expressed his sorrow at seeing a brother practitioner in such an awful position as that of Dr. Jones.

University College, Bristol.

The calendar for 1896-7 has just been issued. It is bulkier than last year, and for the first time contains illustrations, about half-a-dozen good views being given of the College laboratories, museums, libraries, and machine rooms. Ample details are supplied of the educational facilities afforded at the College and of the College and other scholarships. A new feature of the curriculum for the coming session is a series of six lectures upon international law by Sir Charles Kennedy, K.C.M.G. Particulars are also given of the doings of college societies—the engineering, the women's literary, the social and debating, the philosophic, and the Inter-University Christian Union services.

Sad Death of a Medical Student at Ilfracombe.

At Ilfracombe, on Aug. 25th, Henry Vidal Moxon, a medical student, fell from the Torrs Cliffs on to the beach and sustained fatal injuries. At the inquest the medical evidence showed that the skull and spine were fractured. A verdict of "Accidental death" was returned, the jury expressing their deep sympathy with the parents. Mr. Moxon, who was only twenty-one years of age, was the son of Captain Thomas Moxon, late of the Indian army, and was a student at University College Hospital, London.

The New Baths at Clifton.

Large numbers of workmen are busily engaged in constructing the new hotel and hydropathic establishment which is to be attached to the Clifton Spa. At a later date it is intended to build a house on the corner of the cliff for the reception of invalids. When completed the establishment should add greatly to the attractions offered by Clifton to people desiring a health-resort.

Statements of Prisoners.

At Bristol, on Aug. 28th, a coroner's jury returned a verdict of "Wilful murder" against a young woman aged eighteen years whose infant was found dead beneath her bed. The case has a medico-legal interest as the verdict was the outcome of the prisoner's own statement, which she now has no recollection of making.

Water for Domestic Purposes at Swansea

There were several prosecutions at Swansea on Sept. 1st for an alleged wilful waste of water; but the authorities were unsuccessful, as the stipendiary magistrate held that washing windows and footways was not precluded from the term "domestic purposes."

Suicide by Coal Gas.

On Sept. 1st a tailor at Cheltenham committed suicide in the following remarkable manner. He inhaled coal gas by means of a Bunsen burner, such as is used by tailors for heating irons, which he had placed in bed with himself and which was supplied with gas by a tube attached to the gas bracket. The jury found that the man had poisoned himself with coal gas while in an unsound state of mind.

Sept. 8th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Meeting of the Sanitary Institute, Newcastle-upon-Tyne.

ON Wednesday, Sept. 2nd, the fifteenth meeting of the above society was held at Newcastle-upon-Tyne. H.R.H. the Duke of Cambridge, who is president of the institute and the guest of the mayor at the Mansion House, had read to him in the council chamber of the University of Durham College of Medicine by the town clerk an address from the corporation, after which he held a reception in the examination hall of the College. A lunch followed and at 3 P.M. the exhibition in connexion with the meeting was opened by H.R.H. in Olympia. At 4 P.M. the Duke was conducted over the Elswick Works by Lord Armstrong and Sir Andrew Noble. In the evening the President of the Congress, Earl Percy, delivered an address to a large and attentive audience, and Sir D. Galton spoke in enthusiastic terms of the efforts made in Newcastle, particularly since Dr. H. E. Armstrong became medical officer of health, by the sanitary authorities, and quoted from a letter from Sir H. Acland, in which he said he had been endeavouring to induce the Oxford University to make practical work in Newcastle one of the requirements at Oxford for a degree in public health.

New Infirmary for Newcastle.

The mayor's suggestion has been adopted and already upwards of £10,000 have been promised. This sum, in addition to the £5000 bequeathed by the late Dr. G. J. Heath, increases the mayor's fund to £15,000, a quarter of the amount proposed to be raised. No one has yet been asked for a subscription. There can be no doubt that the raising of the money will settle the site question quickly. When the foundation-stone is laid—and it is hoped Her Majesty will be able to perform this function for us—it should certainly be arranged for Mr. Riley Lord, who is the originator of the present movement, to be mayor. The town will owe a lasting debt of gratitude to Mr. Riley Lord for the action he has taken, and the least it can do will be to see that he occupies the post of chief magistrate when the coping-stone is placed upon his happily-conceived scheme.

Assaults upon Young Children in the Public Parks at Newcastle.

Several cases of assaults upon young children by men in the parks have recently been brought before the Newcastle bench. A few days ago a man forty-one years of age was sent to prison for a month for an assault upon a child aged seven years, and the magistrates expressed the opinion that such young children should not be permitted by their parents to go into the parks by themselves. This is a pretty state of things that children cannot be allowed to use the public parks for fear of being assaulted by men. If the bench could have ordered Edward Paterson to have been soundly flogged instead of being lodged in prison for a month the parks would be safer for young children to play in, and it is clear these assaults will not be put a stop to till the law does allow flogging as a remedy. Durham occupies an unenviable notoriety by reason of the numerous cases of criminal assaults upon children. Hitherto Newcastle and the county has been singularly exempt from such offences.

Newcastle-upon-Tyne, Sept. 7th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENT.)

Cases of Gas Poisoning in Glasgow.

AN escape of gas, as a result of which four persons were rendered unconscious—two of them passing into fatal coma—has been engaging the attention of the Glasgow police. The accident occurred in a thickly populated district known as the Calton, and appears to have been due to a leakage from the main pipe by which the tenement was supplied. The victims lived on the ground floor, and it was the smell of the gas in the flats above which first led to an investigation. The police on entering the house found two women and two men in an unconscious condition. After examination by Dr. Wilson Mathie and Dr. Young the

patients were removed to the Royal Infirmary. Here, in spite of treatment, the two men died without recovering consciousness, but the women have gradually improved. There have been in recent years unfortunately more than one precedent for this unfortunate occurrence and no very satisfactory explanation has been provided. The public would feel more assured of their personal safety were official reticence less complete. It cannot be said that in the north we are always enamoured of the proceedings of the coroner's court as it exists across the border, but there certainly are occasions when the private inquiries of the authorities are scarcely adequate to meet the natural and legitimate desire of the public for information and explanation.

Two Charges of Murder.

At the recent circuit court in Glasgow there were two charges of murder, each of which terminated in a verdict of "Not guilty." In each case there were features not unimportant to medical witnesses. The first case was against a young man charged with shooting a girl acting as attendant at a shooting gallery. The prisoner had fired two shots in the usual way; the girl handed to him a gun loaded for the third shot, and immediately afterwards she was shot in the eye and died in the course of a few hours. In her deposition she said she had never seen the prisoner before, but that on taking the gun he had threatened "to do for her" and had then pointed the gun at her and fired. None of the witnesses confirmed this. The occurrence took place in a busy show ground, and the prisoner in his declaration stated that he had no quarrel with the girl and that the gun went off before he touched the trigger. Dr. James Dunlop, who had examined the body for the Crown, was questioned as to the reliability of statements made by a person shortly before death, and expressed the opinion that, considering the condition of the girl at the time the deposition was taken, he would not be disposed to place much reliance on her statements. On the other hand, Sheriff Strachan, who took the deposition, regarded the girl as quite intelligent and free from mental confusion. Under the circumstances the Advocate-Depute departed from the prosecution. In the second case a woman was charged with the murder of her newly-born child. The body when found was considerably decomposed, and the entire case hinged upon the question whether the child had or had not breathed. Dr. Craig Robertson and Dr. Loudon, who examined the body, made a report in which they described the condition of the lungs, and expressed a very positive opinion that the child had been born alive. For the defence Dr. Samuel Sloan was put into the box and stated his conclusion that the facts were not sufficient to support any definite opinion. He denied that the hydrostatic test could be relied upon when decomposition had considerably advanced. The jury acquitted the prisoner.

West of Scotland Seaside Convalescent Homes.

The twenty-seventh annual meeting of subscribers was held in Glasgow on the 7th inst., the chair being taken by Sir James King, Bart. The homes now provide accommodation for 250 persons and their popularity and usefulness are attested by the increasing number of applications for admission. The actual admissions during the past year numbered 4056, of whom 3855 were reported to be restored to health and strength. The treasurer's account shows a small balance in favour of the institution, but there has been a large outlay—upwards of £4500—on the new wing. The average weekly cost of each patient for maintenance has been 4*s.* 10½*d.*, and the gross expenses per week for each inmate 10*s.* 7*d.* The chairman, in moving the adoption of the report, urged the claims of the homes to continued public support, and drew attention to a donation of £500 given by Bailie Sinclair in association with the jubilee of his connexion with the *Glasgow Herald*.

Faculty of Physicians and Surgeons, Glasgow.

At a meeting of the Faculty of Physicians and Surgeons of Glasgow on the 7th inst. Mr. John Edgar, M.A., M.B. Glasg., having passed the necessary examinations and been elected, was admitted a Fellow of the Faculty.

Medical Appointments.

The Govan parish council have appointed Mr. Prince Clark to be medical officer in the north-eastern district and Dr. Wm. Ross to a corresponding position in the Kinning-park district.

Glasgow District Lunacy Board.

At a meeting of the board on the 27th ult. Dr. L. R Oswald reported that on the recommendation of the committee appointed for the purpose the following appointments had been made to Gartloch Asylum: Matron — Miss King, The Retreat, York; Assistant Matron — Miss Helen King, Merryflatts Asylum; Head attendant — Mr. McCallum, Smithston Asylum, Greenock.

Bequests to Scottish Institutions.

By the will of the late Mr. Jas. Reid Stewart of Glasgow the University of Glasgow is to receive a sum of £2000 to be used for the purpose of founding a Fellowship in the Arts faculty. The Royal and Western Infirmaries each receive £1000, and the Victoria Infirmary £500.—The late Mr. Montgomerie Paterson of Dunblane has left £6000 as a trust fund to be distributed amongst the charitable institutions of Glasgow, preference being given to the infirmaries.—From the estate of the late Mr. David Copp a sum of nearly £50,000 is to be paid to charities mainly in Dundee and the neighbourhood. The Maternity Hospital fund receives £5000, the Sick Nursing Society £2000, the Convalescent Home £2000, and the various infirmaries £1000 each.

Sept. 8th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Death from Methylene Bichloride.

AN inquest was recently held at the Mater Misericordiæ Hospital in consequence of a death which occurred there from the inhalation of the vapour of bichloride of methylene. No similar disaster has taken place at that hospital for nearly a quarter of a century. Ether, however, was introduced as the general anæsthetic there twenty years ago. The tendency to decomposition in the so-called bichloride of methylene and the doubtful chemical nature of that drug were long since demonstrated in the pages of THE LANCET, so that notwithstanding the advocacy of Sir Spencer Wells it has for some years been gradually falling into disuse. It has not been administered at the Mater Misericordiæ Hospital for many years except in the cases of children and old people, for which latter, on account of the tendency of ether to cause bronchial irritation, it has often been substituted; in other words, it has been treated as chloroform is in other institutions—as the safe anæsthetic for children and aged people; while ether preceded by nitrous oxide was recognised as the regular and ordinary method of producing anæsthesia for operation. The results of this method of procedure have been admirable. On the other hand, the indiscriminate use of chloroform, the use of which frequently saves time and trouble to the surgeon, has been attended with many disasters at other Irish hospitals as at those in England. The death recently reported was caused by heart failure in a young and strong man, and although a fatty condition of that organ was subsequently discovered the curious fact remained that chloroform had been administered successfully to this patient about a month before and with the same object—namely, the adjustment of a fracture of his leg.

A Female Poor-law Guardian.

In connexion with the proposed reform of the union infirmaries of Ireland it is interesting to note that the recent alteration in the law by which the office of guardian is no longer confined to men has just been availed of for the first time. In the Lishallow electoral division Miss Martin has been elected a Poor-law guardian in the room of Mr. J. G. Porter, resigned.

The Death-rate of Belfast.

The special committee appointed by the corporation to consider the question of the high death-rate of Belfast is sitting regularly and for some reason part of the evidence was allowed to be published in the papers, and the *Northern Whig* is continuing its valuable articles on the question. In its last article it states that from voluntary statement and extracted answers there is the following ominous indication of the sanitary state of Belfast and the system of municipal supervision employed to ensure the health and comfort of its inhabitants. The improvement committee by a majority approved the building of 103 houses upon ground described by the assistant surveyor as a dunghill; that what is known as "made ground"—that is, places filled up with organic material—may be strongly condemned by the medical officer of health in January and approved by him in June. There are 30,000 houses in

Belfast without water-closets and 22,000 without back passages, so that refuse of every kind has to be carried through the houses for removal. The soil in many of the thickly populated industrial districts of the city is saturated and poisoned with sewage matter, and in these districts typhoid fever, typhus fever, and diarrhœa are terribly prevalent. At a meeting of the City Corporation held on Sept. 1st it was officially stated that if plans were passed by the improvement committee and signed by the city surveyor the corporation as a body could not interfere, but it is probable that when the special committee reports its finding as to the causes of the high death-rate of Belfast changes will be made in this matter.

Death of Mr. Nicholas Grattan of Cork.

By the death of Mr. Nicholas Grattan the Cork profession has lost one of its best known members He became a Licentiate in the year 1862 and a Fellow in 1883 of the Royal College of Surgeons of Edinburgh. He was at one time house surgeon of the Cork South Infirmary and County Hospital. Some few years later he resigned, and in a short time became a successful general practitioner. When the Women and Children's Hospital was established he was appointed a member of the staff and held the appointment up to the time of his death. He was also physician to the Cork Blind Asylum. He made almost a speciality of orthopædic surgery, and his great taste for mechanics enabled him to make quite a name for himself in that branch of the profession. He invented an osteoclast and demonstrated the utility of the instrument at St. Bartholomew's Hospital. He also went to America and exhibited his invention in various parts of the States, amongst others in Professor Louis Sayre's clinique at New York. He certainly had most successful cases of genu valgum, but somehow others who used his instrument did not seem to manipulate it with equal dexterity and with as good results. I had the pleasure of seeing him operate and the rapidity with which the bone was broken with comparatively slight damage to the soft parts was singularly remarkable. He had been failing in health for a considerable time owing to heart trouble and died at the age of fifty-seven. The local profession attended his funeral in large numbers to testify their respect and esteem for the deceased.

Serious Outbreak of Typhoid Fever and Remarkable Case of Suspended Animation at Little Island.

Quite a number of people have been almost simultaneously attacked by typhoid fever at Little Island, a district about six miles from Cork. The local authorities are acting with commendable zeal to stamp out the disease and have authorised the consulting sanitary medical officer to afford the dispensary medical man of the district all the assistance in his power. The Local Government Board also sent down Dr. Browne, one of their inspectors, to aid the other two medical gentlemen in investigating the possible cause of the outbreak. They have discovered that the water-supply is at fault. The water is conveyed part of the way by defectively jointed pipes only a short distance under the surface, and it was discovered that the stools of the first patient attacked could readily percolate into the water. The last report states that seventeen were attacked, and of those four have already died. A curious case has occurred which is thoroughly vouched for. A child four years of age contracted the fever and to all ordinary appearances died. The time of the funeral was appointed, and friends were actually on their way to attend it. When the supposed corpse was about to be removed from the bed to the coffin signs of animation were exhibited. The services of the medical man were again requisitioned and the child, opportunely rescued from such a terrible death, is now progressing satisfactorily.

Sept. 7th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

The Antiseptic Action of Silver Compounds.

AT the last Surgical Congress Dr. Crédé of Dresden spoke on the subject of the antiseptic action of silver compounds, and he is now publishing the results of his further investigations. He states that, according to the experiments of Halsted, the metals, and especially silver, have a bactericidal property. Metallic silver applied to an aseptic wound is quite inactive, but when the wound is infected the silver undergoes certain alterations by which it develops strong antiseptic qualities. Dr. Crédé has succeeded in showing that this unexpected effect is due to the bacteria producing lactic acid, which in its turn forms lactate of silver—a white inodorous powder soluble in fifteen parts of water. Streptococci, staphylococci, and anthrax bacilli are destroyed by it in less than five minutes. The growing of schizomyceta on blood serum is hindered by a solution of 1 in 80,000, whilst sublimate of mercury has the same effect only when the solution has the strength of 1 in 20,000. Under the name of "actol" lactate of silver has been used for surgical purposes. Subcutaneous injections of it for anthrax and erysipelas have given very satisfactory results, but it irritates the tissues, and by its ready solubility may have a toxic action. The author therefore looked for some other silver compound which might be free from these drawbacks. Citrate of silver was found to answer best, and was used for 400 hospital in-patients and more than 1000 out-patients. It not only produced no irritation, but the wounds healed under this treatment with a celerity hitherto unknown. The method of application is as follows. Aseptic wounds, after being sutured, are covered with gauze filled with metallic silver in powder, smaller wounds with a layer of silver foil only. Wounds which are not to be sutured are sprinkled with silver in powder and then dressed with ordinary aseptic gauze. Infected wounds require dressing with citrate of silver ("itrol"), and complications, such as erysipelas, cellulitis, &c., are treated by subcutaneous injections of this salt. Cavities such as the bladder may be washed out with a solution of "itrol" containing from 1 to 4 parts of the salt in 10,000. The suture material—silk, catgut, &c.—is covered with a thin layer of metallic silver.

The Duration of Life in the Medical Profession.

Dr. Haegler, chief medical officer to the General Insurance Company of Basle, has recently published an interesting essay on the duration of life in the medical profession. It has long been known that among medical men the duration of life is shorter than among the general population of a like age, and that clergymen, for instance, on an average live twenty years longer than medical practitioners. According to some old statistics of the kingdom of Bavaria only schoolmasters in rural districts have a less expectation of life than members of the medical profession, 75 per cent. of the latter dying before the fiftieth year and 90 per cent. before the sixtieth year of age. These numbers, however, seem to be exaggerated, for a new statistical work on the Kingdom of Saxony, by Dr. Geissler, states that 80 per cent. of the practitioners of that country reached their sixtieth and 25 per cent. even their seventieth year. It is worth mention that medical mortality is very high, especially in the early years after entering on practice, and the life insurance premium to be paid by medical practitioners is on this account 10 per cent. higher than the general insurance rate. The excessive mortality in our profession is not only caused by infectious diseases, which medical practitioners are liable to contract, but also to over-exertion and the impossibility of securing regular seasons for rest and meals. Typhoid fever and diseases of the lungs (phthisis excepted) are very frequent as causes of death, whilst suicide is rarer than among the general population. It is generally recognised that the conditions of life prevailing among any particular class or section of the population have an important bearing on the occurrence of longevity in that class. In former times the services of medical men were but little esteemed: their incomes were as a rule very small, and consequently their average lifetime was short. Then came a period when the condition of the practitioners improved, and accordingly the average duration of life increased, but during the last ten or twenty years various circumstances, including the overcrowding of the profession, have combined to lower the standard of living, and there is thus reason to suppose that the duration of life will be correspondingly shortened.

Medicine in the German Colonies.

The Imperial Health Office has begun to publish a series of medical sketches from the German colonies. The first volume is an essay on malaria and other diseases in Cameroon, a colony on the West Coast of Africa near the Spanish island of Fernando Po. The authors are the two brothers Dr. Albert Plehn and Dr. Friedrich Plehn, both government officers of health in this colony. Malaria is the most frequent disease there. Of 624 Europeans whom

Dr. Friedrich Plehn attended during a year and a half 430 (=70 per cent.) suffered from this illness, and on an average each European had five attacks during this period. In August, 1895, more than 50 per cent. of the Europeans were ill at the same time. Contrary to general opinion, Dr. Plehn states that negroes were liable to suffer from the illness. In the laboratory placed at his disposal by the Government the author made microscopical examinations of the patients' blood. In typical cases he found the well-known plasmodia, but in atypical cases their form was altered. He tried to make cultures and to infect animals, but his efforts were unfortunately unavailing. He calls attention to the fact that an accurate knowledge of the malaria parasite would enable us to carry out more efficacious prophylactic measures. Dr. Albert Plehn reports 288 cases of malaria and 21 of blackwater fever (paroxysmal hæmoglobinuria). It is worth mention that according to his experience Government officers suffered from slighter forms of malaria than civilians. This may depend on the fact that the officials take more care of themselves, whilst the residents who do not belong to the official class continue to work even if seriously ill. The five patients who died from blackwater fever were all civilians, but the officials who suffered from this disease survived. Of the natives the Soudanese were exceptionally liable to malaria. In a special article Dr. Plehn finally treats of the healing of wounds in the native population. He describes a series of cases where very complicated traumatic lesions of the joints and the intestines, although shockingly neglected before surgical aid was sought, nevertheless healed with a celerity unknown in Europe.

Sept. 7th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

The "Bacillus Rabiei."

THERE is no better school of bacteriology in Italy than that of Turin where Dr. Edoardo Perroncito, Professor of Parisitology in the University and of General Pathology and Pathological Anatomy in the Veterinary College, is director of a largely frequented laboratory. One of his assistants, Dr. Bruschettini, already known beyond Italy for his bacteriological discoveries, has for some time been making special studies in the virus of hydrophobia. Contemporary workers in the same field had long suspected a microbe or "bacillus rabiei" and have more or less actively been in quest of it in the laboratories of Pasteur and Koch particularly. To Dr. Bruschettini, however, seems to belong the credit of having at last succeeded in isolating and cultivating the microbe "wanted." As described by him it presents itself under the form of a bacillus, with dimensions much smaller than those of the "bacillus tuberculoseôs"; while, at the same time, it is thicker and has a central part relatively clearer, so as to give it something of a resemblance to the diplococcus. By successive cultivations of this microbe or bacillus Dr. Bruschettini had no difficulty in obtaining in dogs and rabbits all the symptoms of rabies. He produced, by inoculating about 500 such animals, as many well-pronounced cases of hydrophobia. To use his own words, confirmed by his colleagues in Professor Perroncito's laboratory, "l'esperienza non potrebbe più decisiva" (the experiment could not be more decisive). Dr. Bruschettini proceeded at once to Paris to repeat his experiments under the eye of the experts of the Pasteur Institut.

Railway Navvies and Malaria.

The upturning and exposure to the sun of soil long inert or unsubjected to cultivation was shown by Dr. Léon Colin in a monograph compiled at the instance of Napoleon III. to be a powerful exciting cause of malarial poisoning, which he defined in the same memorable State paper to be "une intoxication tellurique." It is in this way that the fever numbers most of its victims—particularly among the navvies employed on the several railway lines, initiated or in partial working, throughout Italy. I have lately drawn attention to the proposal of the Government by which quinine at a cheap rate and of guaranteed purity is to become vendible by village general shops in districts where no pharmacies exist. That proposal has not yet received legislative sanction and will doubtless have a stormy passage through committee, but, pending its becoming law, the profession is asking why other febrifuges found efficacious in malarious regions are not put in practice. "Take," says Dr. Tommasi-Crudeli, "a full-sized lemon, cut it in thin transverse slices rind and all; boil these down in an earthenware jar containing a pint and a half of water till the decoction is reduced to the bulk of half a pint; let this cool on the window-sill over night and drink it off in the morning." Such a draught, he adds, is a most efficacious prophylactic and not without value as a remedy. Railway companies, however, in Italy as elsewhere, are more inclined to pay indemnities for casualty or lesion than to lay out money in preventing them, and so on the main lines navvies are allowed an "indennità" (also extended to the surfacemen and others of the *personnel*) for their exposure to the malaria to which so many of them succumb. This allowance, however, like so many other Italian provisions, has lately been cut down by one half—to the saving of some million lire annually for the companies, but to the corresponding privation of thousands of families whose breadwinners are already miserably underpaid. The "Fascio Ferroviario Italiano," having its seat in this city, has lately sued the company of the "Mediterraneo" line to obtain restitution of that part of the indemnity which has been withheld, and, as I now hear, has gained its cause. This success has encouraged the "fascio" (club) in question to initiate similar proceedings in behalf of the *personnel* of the "Adriatico"—also deprived of their proper indemnity. Perhaps the loss of these suits and the legal expenses incurred may induce the railway companies to institute adequate medical surveillance of their *personnel* and make their lines less insanitary. Not only the "navvy" and the "surface man" would benefit by this innovation, but also (as the said companies would find to their profit) the travelling public. *Quod felix faustumque sit!*

Dr. Andrea Verga

At the recent International Medico-Psychological Congress held at Munich, and at the Congress of Criminal Anthropology, also international, which has just risen at Geneva, no name was quoted with deeper respect than that of the Senator Andrea Verga, "the physician and alienist in advance of his time," whose death at the close of 1895 was duly commented on in THE LANCET. Now a memorial tablet has just been inserted in the façade of his house in Milan (31, Via Durini). This step was taken in pursuance of a proposal submitted to the Milanese town council by the Società Freniatica Italiana conjointly with the directors of the "Patrocinio dei Pazzi Poveri della Provincia di Milano," of which Dr. Verga was the "author and finisher," the creator and promoter. The inscription on the tablet is from the pen of the distinguished poetess Signora Luisa Anzoletti and runs as follows:—"Andrea Verga—senatore del regno—che ospitali e manicomi reggendo—Nuovi veri scoperse e dettò leggi nuove—All'anatomia e alla psichiatria—Dall 1884 abitò, e nel 1895 morì in questa casa—Nota a mille beneficati—Memoranda ai posteri. Il Comune pose." (Andrea Verga, senator of the kingdom, who in his superintendence of hospitals and lunatic asylums discovered fresh truths and prescribed new laws in the domain of anatomy and psychiatry, from 1884 dwelt and in 1895 died in this house, well known to thousands of beneficiaries and to be remembered by posterity. Placed by the Commune.)

The Rainfall.

Professor Antonio Saporetti, director of the Osservatorio Meteorologico of Bologna, has just issued some instructive notes on the excessive rainfall of August, particularly during its closing week. Having regard to the continuity of the days of downpour, the month, if not absolutely unique in history, has been very rarely equalled for the damage it has wrought to agriculture and its inundation of the low-lying grounds. The amount of water which fell in the last nine days was in all 136 millimetres, as against the same quantity in eleven days in 1870 and 128 millimetres in eleven days in 1815. The worst visitation of the kind on record was in 1846, when in eleven days the rainfall amounted to 212 millimetres.

Sept. 5th.

PRESENTATION TO A MEDICAL MAN.—On Aug. 27th, at Newbury, Berks, Mr. Robert Birch was the recipient of a handsome solid silver salver, presented by the members of the Newbury Medico-Ethical Society as a mark of their appreciation of his valuable services as honorary secretary and as a token of their esteem and regard.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT.)

Changes in the Medical Department of the Public Service, New South Wales.

THE Public Service Board of New South Wales has adopted the policy that the public work should be entirely done by men in the service who devote their whole time to it, and in consequence several changes have been made in the various departments, some of which have been previously mentioned. For the last three and a half years the duties of President of the Board of Health have been performed by Dr. Anderson Stuart, who is also Medical Adviser to the Government, Professor of Physiology in the Sydney University, and Dean of its Medical Faculty. His salary as President of the Board of Health was £489 a year. The Government asked him to devote his whole time to this office at an increased salary and resign his other appointments; but Professor Stuart declined, as he regarded teaching as his natural vocation. He accordingly retired from the position of President of the Board of Health, and Dr. Ashburton Thompson, the chief medical inspector to the Board, has been promoted to the position with a salary of £920 a year. Dr. W. Pierce has been appointed assistant health officer to the Board at a salary of £575 a year, less £60 for quarters. The number of members of the Board has been reduced from eleven to five, each member being paid as heretofore £100 a year. The Board of Health was first appointed in 1881 after an outbreak of small-pox, which cost the Government between £90,000 and £100,000 to stamp out. Subsequent outbreaks have been quelled at comparatively small cost. There is no Public Health Act in New South Wales, and the board has recently been devoting a great deal of time to framing a Bill, to be introduced very shortly. Amongst the legislative enactments passed at the instance of the board since its creation are the Dairies Supervision Act, the Noxious Trades and Slaughtering Act, the Diseased Animals and Meat Act, and the Leprosy Act.

The Leprosy Act.

Concerning the last of these, public and professional opinion is not now quite in accord with the board, as noted in a previous communication. Quite recently, in a public lecture on the subject, Dr. Hodgson denounced the rigid system of isolation in force, and exhibited a Chinaman as an example of one who had been wrongly isolated as a leper and with the greatest difficulty released, showing that the Act was not only too stringent but too rigidly administered, allowing of no appeal even when a mistake had been made. He maintained that leprosy was not so contagious as to demand this rigid seclusion, and advocated a voluntary system, under which patients could go into special hospitals if they wished. In support of the views of the board it must be remembered that the conditions in Australia are different to those obtaining in Europe. We are continually exposed to large influxes of Asiatics who settle permanently but continue to live under the conditions to which they have been accustomed in their own countries, and yet mingling freely with the rest of the community, supplying it with food and doing laundry work, so that if they bring leprosy with them their mode of life tends to develop and disseminate it.

Dental Registration and Education in New South Wales.

The Legislature in New South Wales is apparently beginning to recognise that it is not advantageous for the public that the colony should be the happy hunting ground it is for quacks of all kinds. In a previous communication reference was made to the introduction of a Pharmacy Bill, and now a Bill has just been introduced into the Legislative Council for the registration of dentists based on the English Act. At present anyone can practise as a dentist. To provide for the better education of dentists the house committee of the Sydney Hospital has formulated regulations to provide a fully equipped dental department at that institution, and the Dean of the Faculty of Medicine has proposed to the University Senate that a school of dentistry should be established in connexion with the medical school. It would offer a three years' curriculum and a diploma to students successfully passing the prescribed examinations. If this proposal be carried New South Wales will be ahead of the other colonies in dental education. Victoria has a Dental Act and a Dental Board to administer it, and in Melbourne there is a dental hospital as well as a dental department at the Melbourne and Alfred Hospitals, but the facilities for complete instruction of dental students were so meagre and imperfect as to induce private enterprise to establish a dental college fully equipped with laboratories and lecturers.

Dispute at the Eye and Ear Hospital, Melbourne.

The recent annual meeting of the subscribers to the Eye and Ear Hospital, Melbourne, was of more than usual interest, owing to a dispute which has occurred between the committee and the medical staff. For some time it has been customary at the hospital to charge patients a registration fee of varying amount. The fee was recently raised to 5*s.* a month, and the staff wrote to the committee informing them that this fee was too high and was objectionable on two grounds. First, it led the subscribing public to regard the hospital as a commercial concern, and consequently diminished its subscriptions, and, second, the patients thought that when they paid such a fee it was a *quid pro quo* for the services received and they were not the recipients of charity, and in consequence the hospital was abused and patients admitted who could well afford to pay fees to private practitioners. The secretary to the hospital sent a report to the committee on the subject, in which he virtually charged the staff with a desire to control the institution in their own interests, to quote his own words "the doctors would like to make the hospital a sort of irrigating channel to nourish their own banking accounts." He stated that during seven years 1600 cases had been refused admission as being able to pay for medical attendance and fully three-quarters of them had been sent to the surgeons to the institution, and paid them fees varying from one to fifty guineas. The committee supported the secretary and declined to reduce the registration fee, ordering that the admission card should clearly state that the fee was not for medical advice. The medical officers were directed to treat patients as admitted without inquiring into their means, but if they had special knowledge of the ineligibility of any particular applicants for relief to refer them back to the secretary. At the annual meeting a subcommittee was appointed by the subscribers to inquire into the whole of the questions at issue and to report to another meeting.

Public Testimonial to the late Staff of the Adelaide Hospital.

On July 29th, the Victoria Hall, Adelaide, was filled with a large audience, when a presentation was made to the late members of the honorary medical staff of the Adelaide Hospital. The testimonial bore over 9000 signatures, representing every class in the community, and expressed the sympathy of South Australians with the late staff and hearty thanks for their past labours and kindness. The chairman of the meeting in presenting the testimonial made a most eloquent speech, in which he eulogised the late staff and referred to the circumstances of the hospital dispute as the most shameful in the history of the colony. Dr. Hayward, chairman of the late staff, in replying, denied that the staff had been actuated by any political feeling whatever, and had resigned, not from pique or hastily, but after mature thought as the only course open to them as honourable men, and a course to which they were driven by the Government, which had "evicted" them from their position as surely and effectively as a harsh landlord does a Highland crofter. He also said that the staff would never forget the wonderful self-abnegation of their brother practitioners throughout Australia and especially in Adelaide in declining to fill their places.

Annual Report of the Melbourne Hospital.

The report of the Committee of Management of the Melbourne Hospital for the year ending June 30th, 1896, shows that the total income was £25,700 and expenditure £22,500, but there was a debit balance of £13,900 from the previous year, leaving an indebtedness of £10,700. During the year a special appeal was made to wipe out this deficiency, resulting in the collection of £5200. During the year 4590 in-patients and 15,969 out-patients were treated. The chairman stated that the Government grant had been reduced by £1000, and private contributions had fallen off by £644. He also observed that very few of the patients had contributed anything to the funds of the institution. The Government also threatened to stop its annual grant unless the hours of the nurses on duty were reduced to

eight hours a day. The present average time on duty was ten and a half hours, and the nurses themselves had not complained.

Donation to Sydney Hospital.

Dr. F. H. Quaife has given £100 to the Sydney Hospital for the purpose of obtaining the most perfect apparatus for producing the Roentgen rays.

Aug. 2nd.

Obituary.

ARTHUR HENRY WILLIAMS, M.A., M.B., B.C. CANTAB.

WE regret to have to record the premature death of Dr. Arthur Williams of St. Leonard's-on-Sea. He was the third son of the Rev. J. M. Williams and was born on July 13th, 1862, at Burnby, in the East Riding of Yorkshire, of which parish his father was at that time rector. He was educated at Pocklington Grammar School, and in 1881 he took up from that school a Dowman Exhibition to St. John's College, Cambridge. His medical tutor at St. John's was Dr. Donald MacAlister. He passed the First M.B. Examination in December, 1882, and in the College Examination (Chemistry, Botany, Anatomy, and Physiology) in December, 1883, he was placed in the first-class with the late Mr. E. H. Acton, afterwards Fellow and Lecturer at St. John's, Professor Phillips of Bangor, Dr. James Kerr of Bradford, and others; he was awarded a college prize and an exhibition on Sir Ralph Hare's foundation. In the Natural Science Tripos (June, 1884) he took second-class honours in botany, chemistry, physiology, anatomy, and graduated B.A. He passed the second M.B. in December, 1884, and entered at Guy's Hospital, where, after serving the usual junior offices, he was appointed house surgeon in 1887. He held at Guy's Hospital also the office of resident obstetric assistant, and obtained the gold medal in surgery, and the Mackenzie-Bacon prize in nervous disease and insanity. He graduated M.A., M.B., and B.C. in 1888, and at the time of his death was engaged on the preparation of his thesis for the degree of M.D. Shortly after leaving Guy's Hospital he entered into partnership with Dr. E. Duke of St. Leonard's. Endowed with winning manners and possessed of a sound and extensive knowledge of his profession, he had already achieved considerable success in practice and greater success in the future seemed assured. He suffered a severe attack of influenza about two years ago and since then had not been in robust health. Early in August he took a short holiday and went to Harrogate, where on a previous occasion he had derived benefit from the waters. But on this occasion his health rapidly deteriorated. He returned to London and consulted Dr. Goodhart, who took a very serious view of his condition, and advised his removal to Guy's Hospital, where he died, in Bright's Ward, on Aug. 23rd. The cause of death was acute anæmia. He was buried at Woking Cemetery on Aug. 26th. He leaves a widow and one son.

JOHN W. WOLFENDEN, L.R.C.P. EDIN., L.R.C.S. IREL.

THE death of a popular and widely respected country practitioner, Mr. John W. Wolfenden of Tutbury, Staffordshire, occurred suddenly on Aug. 30th at Evenlode Rectory, Worcestershire, the residence of his son-in-law, the Rev. H. J. Kelsall. Mr. Wolfenden was one of the sons of a clergyman at Miltown Malbay in the West of Ireland, three of whom entered the medical profession. He commenced his medical career as assistant to Dr. Totherick, then of Sudbury, Derbyshire; and on his marriage removed to Tutbury to manage an outlying division of the practice. On Dr. Totherick's appointment as honorary physician to the Wolverhampton General Hospital the Tutbury practice became his own, and he carried it on very successfully for twenty-five years, gaining the esteem and affection of all ranks by his genial manner and the kindness and care with which he treated rich and poor alike. About three years ago, however, after an attack of influenza, his health so completely broke down that he was compelled to resign all active work to his partner, Mr. Kildare Dobbs, and his assistant, moving about when able to the houses of his friends, where he was always a welcome guest. His funeral took place at Tutbury Church on Sept. 2nd, and was a touching and impressive sight. His friends and patients in great numbers assembled in the churchyard on the side of the hill surmounted by the ruins of the grand old castle which overlooks for many miles the beautiful valley of the Dove, to see him laid at rest where he had spent the most useful part of his life.

THE SANITARY INSTITUTE:

CONGRESS AT NEWCASTLE-ON-TYNE.

THE fifteenth Congress of the Sanitary Institute of Great Britain was opened at Newcastle on Wednesday, Sept. 2nd.

The President of the Institute, H.R.H. the Duke of Cambridge, visited the historic city in the morning. After his reception at the Mansion House his Royal Highness drove to the College of Medicine, where he was presented by the Mayor with an address of welcome on behalf of the Corporation. Subsequent to the luncheon, which was served at the Grand Hotel, Barras Bridge, his Royal Highness formally opened the Health Exhibition, held, in connexion with the Congress, at Olympia. In the evening he again visited the College of Medicine, where the inaugural address was delivered by Earl Percy, the President of the Congress.

The compliment which Earl Percy paid to the Duke of Cambridge in proposing a vote of thanks to his Royal Highness for his kindness in opening the Health Exhibition might have been applied to the most aggressive sanitarian with equal truth. "His Royal Highness," said his lordship, "has spent his life in the most peaceful vocations," a statement which he explained by showing that the best way to preserve peace is to be prepared for war. His Royal Highness had devoted his life to preparing the country for war, which was the most peaceful of all vocations. Sanitary measures of a prophylactic nature are often looked upon by the general public with disfavour, and the fact cannot be too often reiterated that the freedom of this country from the plagues which characterised it in the past and from which other countries are not now free is in a great measure owing to the preparations which our sanitarians have made to receive the enemy should he attempt to invade us.

Earl Percy's address, which was principally confined to what he described as a hygienic view of Northumberland, dealt with the rural exodus, the problems of sewage disposal, water supply, and other difficulties in public sanitation. Referring to modern improvements in the matter of road-making, he admitted the advantages of wood paving, but thought that under the present system of watering and scavenging the air is loaded with a very large amount of undesirable material. This is a matter which should certainly receive more attention than it does, and the reality of the evil is often painfully evident during hot and dry weather in the increased prevalence of catarrhal troubles. Passing to the duties of local authorities in carrying out sanitary reforms, he urged that these authorities should endeavour by all means in their power to obtain the necessary technical knowledge the lack of which is often as much a source of delay and vacillation as the laudable and wholesome fear of the ratepayer. The policy adopted by many county councils in appointing an officer of health for the whole county, to supplement and to assist, though not to supersede, the medical and sanitary officials, was one he suggested which, if judiciously worked, might do much to secure uniformity of action and a wholesome pressure.

At the Ladies' Conference on Domestic Hygiene, held under the presidency of the Mayoress, Mrs. Albert Lord, a most interesting paper was read by Mr. E. B. Turner,

F.R.C.S., on Sanitary Aspects of Cycling for Ladies. He contended that in spite of the censure which had been passed on the gentler sex in some quarters for cycling, it was nevertheless a fact that the health of women who cycled had been greatly elevated since they commenced "wheeling." The matter of appropriate dress he regarded as very important. The cardinal points in this respect was that the innermost garments should be of wool and that all the habiliments should be loose. He deprecated long runs by young girls, and racing for women, he said, was in the highest degree injurious. He concluded with a warning which should be the motto of every female cyclist—"moderation—again 'moderation'—and loose clothing."

Among the resolutions passed at the Congress was one which accused boards of guardians of having proved themselves to be entirely inefficient bodies to be entrusted with the administration of the Vaccination Acts.

For all practical work the proceedings of the Congress closed on Tuesday, Sept. 8th, the work of the day being chiefly devoted to the subjects of chemistry, meteorology, and geology. Among the papers of interest was one on the Importance of Village Water-supplies, by Dr. J. C. Thresh.

THE SECTIONS.

The majority of the Sections commenced work on Thursday, Sept 3rd, and the attendance at each was good considering the somewhat dull state of the weather.

CONFERENCE OF PORT SANITARY AUTHORITIES.

Mr. A HOLT-BARBER (Chairman of the Port of London Sanitary Authority), the President of this Section, in his address dealt with the work carried on by port sanitary authorities; first the very important duty of medically examining all vessels arriving from over seas and in cases of arrival from ports scheduled as being infected a medical examination of every person on board; secondly, the sanitary inspection of all vessels, whether coastwise or otherwise, for the purpose of examining the accommodation provided for those living on board, whether crew or passengers, and where this accommodation was found to be defective, pointing out the defects and serving notices for alteration and correction. He pleaded for a wider recognition of the work of port sanitary authorities, who were keeping the front door of the kingdom, and the importance of keeping the country free from an importation of foreign disease was very great, even from a monetary point of view. An enormous disturbance of trade and of all business transactions would follow if once foreign disease got a footing in this country.

In a paper read by Alderman FRASER (chairman of the Hull and Goole Port Sanitary Authority) it was pointed out that on the Humber in seven years 32,790 inspections of ships of all nationalities had been made. The sanitary defects found on board these ships amounted to 2403, of which 2037 had been remedied. In 372 instances bad water and foul tanks were discovered. The water was cast over the ship's side, the tanks cleansed, and a pure and plentiful supply of fresh water provided. Seventy-two cases of infectious disease were reported, and removed to the hospital, and a total of 398,818 emigrants were landed and helped forward on their journey. During the cholera outbreak in Hamburg in 1892, though cases came to the port of Hull, in not a single instance was the disease contracted by the inhabitants of the borough.

Mr. THOMAS WALTON (Southampton) read a paper on Port Sanitary Administration. Discussing the regulations which would be most useful to the Local Government Board, most workable, and most satisfactory to port sanitary authorities, shipowners, and masters alike, under the New Public Health Act of 1896, he suggested for their guidance that such regulations should provide:—1. Every vessel having an infectious disease on board, shall hoist a signal either three miles from the coast, or at and from the nearest signalling station to the port of destination. 2. A declaration shall be made by the master of every vessel, when free, that there is no infectious disease on board, such declaration to be delivered to the officer of Customs. 3. A false declaration shall be deemed an obstruction under the Act, and shall render the master liable to the penalty therein provided—viz., £100. 4. The officer of Customs receiving the declaration shall issue a permit for the vessel to proceed. 5. Vessels infected with either of the principal infectious diseases shall bring up at a boarding station, to be fixed by the port sanitary authority and the Customs, and await with signal the visit of the port sanitary medical officer. 6. The vessel shall not proceed until pratique certificate is given by the port medical officer, subject, however, to a provision that there shall be no unreasonable delay. 7. The removal of infectious cases and disinfection of the vessel shall be carried out as expeditiously as possible in order that there may be the least possible inconvenience and delay in the disembarking of the passengers and cargo.

Dr. HOPE (on behalf of Dr. THOMAS CLARKE, chairman of the Liverpool Port Sanitary and Hospitals Committee) read a paper on Port Sanitary Regulations and Preventive Measures.

Mr. A. WELLESLEY HARRIS (medical officer of the Port of Southampton) read a paper on Port Sanitary Administration.

After considerable discussion it was decided that the Conference approve generally the regulations suggested by Mr. Walton and that the Local Government Board be requested to submit their proposed regulations to each sanitary authority for their observations thereon before issuing them. It was also resolved that the first resolution should be altered to read: "Any dangerous infectious disease, such as yellow fever, cholera, or small-pox."

Mr. R. SHERITON HOLMES (clerk to the Tyne Port Sanitary Authority) read an important paper on the Suggested Amendment of Port Sanitary Law, and Dr. W. COLLINGRIDGE (medical officer of health of the Port of London) read a paper on Sanitation on Board Ships, in which he advocated more cubic feet of space per man, better lighting, ventilation, and heating arrangements, good water storage, and more accommodation for washing in the crews' quarters.

Mr. E. W. DE RUSSETT handed in a paper on Structural Sanitary Arrangements of Ocean Steamers and Warships.

MEDICAL OFFICERS OF HEALTH.

The Address of the President, Dr. Alfred Hill, the medical officer of health for Birmingham, will be found at page 735 of our current issue.

Dr. T. COKE SQUANCE (Sunderland) read a paper on The Control of Milk Supplies by Sanitary Authorities. He said it was very desirable that sanitary authorities should have control of milk supplies, but under existing circumstances much could be done if the by-laws under the Milk Shops and Dairies Order were strictly enforced, and if they were increased in stringency a great improvement in cleanliness would result.—Mr. VACHER (Birkenhead), Dr. BOOBBYER (Nottingham), Sir CHARLES CAMERON (Dublin), Dr. MARSDEN (Birkenhead), and others took part in the discussion.—On the motion of Dr. MARSDEN the following resolution was carried: "That in the opinion of this conference the present low standard of milk quality adopted by the Somerset House authorities, especially in regard to fat, leads to considerable injury to the public, especially to children, and that it is desirable that this standard should be raised."

Dr. CHARLES PORTER (Stockport) read a paper on The Control and Supervision of Public Water-supplies by Sanitary Authorities. After some discussion the following resolution was passed: "That it be a recommendation to the Council that it is highly desirable that organised effort be made to acquire for any persons duly authorised on that behalf by any sanitary authority the right at any time by day or night to visit every part of every source from which water for the public supply is obtained, and especially to those places in which filtration or purification is effected."

Dr. L. WILDE (East Sussex) read a paper on an Outbreak of Rabies at Croydon, giving an outline of the anti-rabic treatment of inoculation at the Pasteur Institute.—Brigade-Surgeon-Lieutenant-Colonel PRINGLE said that the treatment he adopted for the bite of a rabid dog was very free incision and suction. They should never cauterise. If they burnt the part they prevented the possibility of anything being drawn out. He was satisfied that free incision with the knife and the application of suction would be effective.

Dr. KENWOOD (London), on behalf of Dr. F. J. WALDO and Dr. D WALSH, read a paper on Whole-time Service of Medical Officers of Health *versus* Part-time Service. The writers maintained that the medical officer of health should

be, except in a few imaginable and rare cases, whole-time men; wherever possible he should always have had some previous experience of actual medical work; the whole-time man was more likely to be in touch with his brother medical practitioner; plural appointments were generally to be condemned on much the same grounds as part-time service; an adequate salary was necessary to the medical officer of health, and security of tenure must be absolutely secured for competent officers; in scattered rural and small urban districts the sanitary authorities should be centralised; no existing part-time posts should be abolished without compensation; and that the matter of the whole or part-time employment of medical officers of health was worthy of careful investigation and report by a sub-committee of the Institute.

The proceedings in this section were continued on Friday, Sept. 4th. Amongst the papers then read was one by Dr. OLIVER (Newcastle) entitled Are Coal Miners Exempt from Cancer? He arrived at the conclusion that the miners of Northumberland and Durham were not exempt, and that whilst they had no special immunity from this disease they did not appear to be more predisposed to it, but suffered less than the general population.

CONFERENCE OF SANITARY INSPECTORS.

The Presidential Address in this section was given by Dr. GEORGE REID. We shall publish it in a future issue.

Mr. WM. BLAND URMSTON read a paper on Sanitary Work in Rural Districts.

Mr. TOM STAKE (Manchester) read a paper on the Spread of Scarlet Fever. He urged that every possible influence should be brought to bear upon the Government to make the Notification of Infectious Diseases Act compulsory, and by the aid of the Local Government Board a more uniform, consistent, and thorough means should be taken to prevent the spread of infectious disease by every means under their control.

The Conference was resumed on Sept. 4th, when the following resolution was carried: "That this meeting of sanitary inspectors, held in connexion with the Newcastle Congress, recommends the Council of the Sanitary Institute to support the Superannuation Bill promoted by the Sanitary Inspectors' Association."

FRIDAY, SEPT. 4TH.

SANITARY SCIENCE AND PREVENTIVE MEDICINE.

The Presidential Address was delivered by Professor W. H. Corfield on "The Teaching of Public Health." It consisted of an interesting though brief review of hygienic teaching from the time of the "old masters" Hippocrates, Celsus, Galen and Herophilus to the present day and included the work of such men as John Caius, Nathaniel Hodges, Edward Jenner, Pasteur, and other savants. Referring to the work done by the congresses and exhibitions of the Sanitary Institute, he said that by far the most important work was that which was done in the class room, the laboratory, and out of doors, or, should he say, in the courts and alleys of our great towns. It was only in these places that an accurate practical knowledge of public health work in its various branches could be acquired.—On the motion of Earl PERCY a well-merited vote of thanks was accorded to Professor Corfield for his able address.

Dr. W. H. NEWTON, chairman of the Sanitary Committee of the Newcastle Corporation, read a paper on Small-pox and Vaccination. The tendency of parents, he said, to refer to vaccination every disease, especially those of a cutaneous character, which the child may afterwards develop, was very general. Most of the allegations were without proof or probability—mere illustrations of "post hoc, propter hoc."

Dr. ARTHUR NEWSHOLME (Brighton) read a paper on the Spread of Enteric Fever by Means of Sewage-contaminated Shell-fish.—Sir JOSEPH EWART (Brighton) pointed out from previous experience the difficulties which arose in the way of getting authorities to recognise scientific discoveries. If the Government could be convinced of the truth of Dr. Newsholme's investigations, they should have means placed at the disposal of health officers by which a large proportion of typhoid fever which occurred and could not be accounted for under ordinary conditions would be prevented.—Sir CHARLES CAMERON and Dr. WILLOUGHBY (Eastbourne) took part in the discussion which followed.

THE FOURTH INTERNATIONAL CONGRESS OF CRIMINAL ANTHROPOLOGY.

(FROM OUR SPECIAL CORRESPONDENT.)

(*Continued from p. 628*)

EARLY in the proceedings—indeed, according to some, before the Congress met—it was seen that the main interest would turn on the Lombrosian thesis of the "Uomo delinquente" or "born criminal," the apologists of which, chiefly from the south of the Alps, would not be without auxiliaries from the north of the same boundary, chief of whom were Dr. A. Forel, Professor of Psychiatry at Zürich, and Dr. Bechterev, professor of the same subject at St. Petersburg. On the other side the determined antagonists of that thesis were Dr. Naecke of Leipzig, Dr. Dallemagne of Brussels, where he holds the chair of Legal Medicine, and M. Ignace Zakrewski, Senator and some time Procureur-Général at St. Petersburg, reinforced by others, likewise from the north, the ablest of whom was undoubtedly Dr. Bertillon of Paris, whose experience of infantile psychology was almost unique among the Congressisti. In the afternoon sitting of the 24th Professor Lombroso opened the real business of the Congress with a paper studiously moderate in tone on "The Progress of Anthropology and Sociology since 1890," in which, restricting himself ostensibly to narrative and avoiding dogmatic assertion, he sought to create an impression favourable to his thesis. His facts were adroitly chosen and skilfully manipulated, but the doctrine lurking behind them did not escape his opponents, of whom Dr. Naecke was the first to mount the tribune and assume a directly hostile attitude to the whole Lombrosian theory and Lombrosian school. Germany, he argued, rejected the "Uomo delinquente" *simpliciter* on the ground of special investigations and special findings. His somewhat peremptory, not to say acrid, tone was in marked contrast to that of Professor Dallemagne of Brussels, whose mellifluous oratory was none the less powerful for its obvious desire to save the *amour propre* of the Italians. "Is there," he asked Professor Lombroso, "un type anatomique en dehors duquel il n'y a pas de criminel?" If the Professor could give a convincingly affirmative answer to this he would have proved his point. This attempt to "corner" Lombroso brought to the rescue Dr. Forel and Professor Bechterev, who sought to minimise the effect of Professor Dallemagne's centripetal interrogatory; but the real defence was undertaken by Signor Enrico Ferri, Professor of Criminal Law in the Roman school, who proved himself a very able and versatile, if not conclusive, gladiator. He denied that the Lombrosian theory postulated an anatomical type rigidly defined. The born delinquent, he maintained, is a complex and at the same time a complete personality, with a biological, a psychological, and a sociological side. Criminality itself, he continued, is the resultant of a triple order of factors—an anthropological factor, another factor constituted by the physical environment, and yet a third factor consisting in the sociological environment. Having copiously and clearly illustrated his meaning he proceeded to show that a man may be born into the world with all the "stigmata" (pathognomonic marks) of criminality, and yet, thanks to fortunate surroundings, go to his grave without having committed a crime, his "social environment" supplying the requisite counteracting force. *Per contra*, a man may be thrown into an environment favourable to crime, and yet from his hereditary antecedents preserve himself from committing it. This exposition, of which no adequate impression can be given in a condensed report, closed the discussion for the day, and evoked from Professor Dallemagne a courteous acknowledgment of Professor Ferri's ability and the general soundness of his views—views, however, differing widely from those originally enunciated by the Italian school.

The next day's sitting was largely attended, the attraction being a possible renewal of the encounter between the northern and the southern schools occasioned by Professor Dallemagne's elaborate and ably-reasoned paper on Degeneration and Criminality and Professor Ferri's thesis on Temperament and Criminality. Nor was the anticipation disappointed. Professor Dallemagne, in common with all anthropological schools, classified mankind under two heads, the normal and the degenerate. But what characteristics brought a man under the latter? Degeneracy is but an

abstract formula, a generalisation including biological processes, different in character, but all combining towards one issue—the extinction, whether of the individual or the species. In this view it is a normal biological process, nay, even a "process of selection," carried out under the influence of individual factors and of factors proceeding from the "milieu social" (social surroundings). Every bearer of a "stigma" is a "degenerate." But there are degenerates of all degrees, from those whose imperfect organisation betrays itself only furtively and at intervals to those whose degeneracy is fatally established. We may divide them into "déséquilibrants, déséquilibrés, dégénérants, et dégénérés." All are deviations in some degree from the normal state characterised by the equilibrium between the three great groups of man's necessities—"besoins nutritifs, besoins génésiques, besoins émotifs et intellectuels." Degeneracy is recognisable by "stigmata" anatomical, biological or functional, and sociological—the latter consisting in the difficulty which the individual experiences in adapting himself to the "milieu" in which he lives. Criminality is also an abstract formula, implying a predisposition, which is at its maximum in the criminal by instinct or profession; at its minimum in the criminal by opportunity, passion, or necessity. Of the many attempts to define the relations between degeneracy and criminality none are satisfactory, and we are driven to the twofold question: In a given criminal what is the extent, the importance, the "efficacité criminelle" of the degenerative predisposition? and again: In a degenerate, how can we properly appreciate the inclination towards criminality? Professor Dallemagne sought to apply these principles, not to special cases, but to groups uniform enough to admit of our "individualising" them. The idiot, whose degeneracy precludes motive, can never be a criminal. The imbecile whose degeneracy leaves him instinctive thoughts is found coupled with a reinforced predisposition to crime. "Les obsédés" (possessed), the impulsive, derive from their "possession," from their impulsiveness itself, their tendency to crime. Neuropaths are often criminals from sheer neuropathy, whether it take the form of an "émotivité" wrought up by hyperæsthesia or a force which destroys their resisting power (inhibitory paresis). Finally, there are cases where no indication of degeneracy has appeared independent of the act itself which constitutes the crime. Criminality and degeneracy are entities which obey their own evolutionary law; but we can exercise a determining force upon them. To the physician and the jurist belong the study of their causes and their remedies—to these professions combined belongs the task of social rehabilitation. By general admission this was one of the most useful, as being the most temperate and lucid, paper on the *agenda* and its author received congratulations accordingly. In thanking him for it, however, Dr. Naecke did not fail to deliver a trenchant attack on the Italian school. On the other hand Prof. Forel found Prof. Dallemagne in certain points too absolute. A "degeneration" may be the result of a "selection" produced in the evolution of humanity. Baldness, for example, so widely on the increase, may be the symptom of the future disappearance of an appendage becoming more and more useless, to be compensated by some new development of the brain. Concluding, Professor Forel animadverted on Dr. Naecke's tone in criticising the Italian school. Professor Lombroso, he contended, amid the general applause of the assembly, was the creator of criminal anthropology, and while his doctrines were open to criticism there was none of them from which, if candidly and competently discussed, science would not be the gainer.

Geneva, Aug. 27th.

THE CHICHESTER WATERWORKS TO BE PURCHASED.—For some time a discussion has been going on in the city of Chichester as to the rates of payment demanded by the water company of the corporation for the supply of its commodity and also as to the terms upon which the concern of the former could be acquired by the latter body. The matter was considered to have been determined in the negative as regards the purchase of the works; but a special meeting of the corporation was held on Friday, Aug. 28th, at which it was agreed to accede to certain modified terms of the water company, and the agreement between the parties as to the terms of the purchase of the concern will come up for signature at the next meeting. The price will be between £46,000 and £47,000.

Medical News.

THE Queen's Hospital, Birmingham, has sustained a serious loss by the death of Miss Mary Cadbury, the lady superintendent of nursing, from acute meningitis.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The autumn meeting of the South-western Division will be held at Fisherton House, Salisbury, on the afternoon of Tuesday, Oct. 20th. An interesting discussion will be opened on Constipation in the Insane.

KIRKE'S HANDBOOK OF PHYSIOLOGY.—In our recent Students' Number we described this popular manual as out of date. We are glad to learn that a new and thoroughly revised edition is to be immediately forthcoming under the editorship of Professor W. D. Halliburton, F.R.S., and from the well-known publishing house of Mr. John Murray. The main feature of Kirke's Handbook, and the one that has ensured its popularity with so very many students—viz., that it includes Histology and Physiology proper within the compass of one volume—is to be retained. But in many directions where the march of knowledge has made such alteration necessary the book has been completely re-arranged and re-written.

PROPOSED MODEL LODGING-HOUSE AT EASTBOURNE.—A Local Government Board enquiry was held at Eastbourne recently with regard to loans required for various purposes, the chief being £1200 for a site for a municipal model common lodging-house. There is at the present time only one common lodging-house in the town, with accommodation for thirteen persons; and for some two or three years the matter has been under consideration of the Corporation, much opposition having been forthcoming to the various sites suggested. It was stated that room was really needed for 150 tramps each night, who now resorted to the Crumbles and to the beach among the bathing machines. At the next meeting of the Corporation sketch plans of a building similar to that of the London County Council were submitted, and the total cost (including the site) was put at £5800. It was agreed to apply for leave to borrow a further sum of £4600 to pay for the erection of the building.

THE POLLUTION OF RIVERS.—An important case—one of a small number in which action has been taken by private individuals—was heard during July, and has only just been decided by his Honour Judge Gye in the Hampshire county court. Mr. William Fowle and others, riparian and mill-owners, sought to prevent the town council of Andover from polluting the River Anton, and his Honour had withheld his judgment. He has now decided, having viewed the river, that the plaintiffs were persons aggrieved within the meaning of the Rivers Pollution Act, 1876, and that they possessed the ordinary right of riparian owners to have the flow of the stream come to them unpolluted; that the Andover town council had knowingly permitted the sewage to fall into the stream; that there was serious pollution of the river; and that the council had not taken any steps for rendering harmless the sewage so falling into the stream. Further, he was of opinion that they were able to prevent the sewage flowing into the stream, and the judge had no hesitation in saying that the condition of the river was very bad. He, therefore, granted an order requiring the corporation to abstain from polluting the stream, suspending the operation of the order until Oct. 31st, with liberty to either party to apply on Oct. 23rd, when he would exercise his discretion as to whether he would further suspend the order or not, as to which he would be guided by seeing if any operations or negotiations were on foot to remedy the evil. The judge also gave the plaintiffs costs on the higher scale and the costs of the shorthand notes and of expert evidence.

LITERARY INTELLIGENCE.—The following are some of the new books announced by Messrs. J. and A. Churchill for early publication:—"The Surgery of the Alimentary Canal," by Alfred E. Maylard, M.B. Lond., F.F.P.S. Glasg., Senior Surgeon, Victoria Infirmary, Glasgow, with numerous plates. In order to depict more vividly the particular injury or disease of a region the author has supplemented the text with a case. "Dental Materia, Pharmacology and Therapeutics," by Charles W. Glassington,

M.R.C.S. Eng., L.D.S. Edin., Senior Dental Surgeon, Westminster Hospital, Lecturer on Dental Materia Medica and Therapeutics, National Dental Hospital, with a chapter by Dr. Maughan on the Anæsthetics used in Dental Surgery. Also, a new edition, thoroughly revised and enlarged, of "The Microtomist's Vade-Mecum: a Handbook of the Methods of Microscopic Anatomy," by Mr. Arthur Bolles Lee.—Mr. H. K. Lewis will publish shortly a fourth and greatly enlarged edition of Professor Crookshank's "Textbook of Bacteriology." This new edition will contain twenty-two original and coloured plates and 273 illustrations in the text.—Messrs. Geo. Bell and Sons are about to issue a publication entitled "Men and Women of the Century." The work comprises a series of portraits and sketches by Mr. Rudolf Lehmann of various notable men and women who have sat to him between 1847 and 1895. There is a number of medical and scientific men, besides literary, political, and musical celebrities. The notices and short biographies are supplied by Mr. H. C. Marillier, and the portraits are reproduced by the Swan Electric Engraving Co. Judging by the two specimens we have received, the one giving the effect of mezzotint of Sir Spencer Wells and the other a reproduction of a charcoal drawing of Sir Robert Lowe, the work is of the highest excellence.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ALLISON, S. H. B., B.A., M.B., C.M. Edin., has been appointed Medical Officer and Medical Officer of Health for the Claudy Dispensary District of the Londonderry Union.

AMBROSE, A., M.D., B.S. Dubl., D.P.H. Camb., has been appointed Medical Officer of Health for the Buckhurst Hill Urban District.

BASHALL, CHARLES E., M.R.C.S., L.R.C.P., has been appointed Medical Officer of the Workhouse of the Kingsbridge Union.

BLADER, P. L., L.R.C.P., M.R.C.S., has been appointed Senior Obstetric House Physician to St. Thomas's Hospital.

BOWHAY, A., L.S.A., M.R.C.S., L.R.C.P., D.P.H. Camb., has been appointed Medical Officer of Health to the Calstock Rural Sanitary Council.

BOYD, JOHN STEWART, L.R.C.P. & S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for No. 6 District of the West Ham Union, Essex.

BRYANT, H., has been appointed Medical Officer of the Fontmell District of the Shaftesbury Union.

CARTWRIGHT, J. A. T., M.R.C.S., L.S.A. Lond., has been appointed Medical Officer of Health for the Wigmore Rural District.

CLARK, SIMON PRINCE, L.R.C.P. Edin., L.F.P.S. Glasg., has been appointed Out-door Medical Officer for the Eastern District of Govan.

COLLINS, WILLIAM C. G., M.R.C.S., L.R.C.P., has been appointed Medical Officer of the Aylesford District of the Malling Union.

COLLIS, E. L., B.A., M.B., B.Ch. Oxon., L.R.C.P., M.R.C.S., has been appointed Junior Obstetric House Physician to St. Thomas's Hospital.

CONFORD, G. J., B.A., M.B., B.Ch. Oxon., L.R.C.P., M.R.C.S., has been appointed House Physician to St. Thomas's Hospital.

COWAN, HORATIO, M.B., C.M. Aberd., has been appointed Surgeon to the White Star Line Company's Steamship *Gothic*.

DAWNAY, A. H. P., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Special Department for Diseases of the Skin, St. Thomas's Hospital.

DURRANT, C. E., L.R.C.P., M.R.C.S., has been re-appointed Clinical Assistant in the Special Department for Diseases of the Ear, St. Thomas's Hospital.

DYBALL, B., L.R.C.P., M.R.C.S., has been appointed House Surgeon to St. Thomas's Hospital.

FINN, G. TAAFFE, L.R.C.P. & S. Edin., L.F.P.S. Glasg., has been appointed Assistant Medical Officer to the County Asylum, Newport, Isle of Wight.

FRAZER, W. D., L.R.C.P., M.R.C.S., has been appointed House Surgeon to St. Thomas's Hospital.

GERVIS, F. H., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

GROSART-WELLS, P. P., L.R.C.P. Edin., &c., has been appointed Medical Officer of Health to the St. Albans Union Workhouse and No. 1 District, vice J. Morison, resigned.

HEMSTED, E. S., M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer of the Kintbury District of the Hungerford Union.

HICHENS, P. S., M.A., M.B., B.Ch. Oxon., L.R.C.P., M.R.C.S., has been appointed Ophthalmic House Surgeon to St. Thomas's Hospital.

HISLOP, JOHN T., L.R.C.P. Edin., &c., has been appointed Medical Officer of Health to the Knaresborough Rural District Council, vice A. O. Wiley, resigned.

HUNT, J. H., M.B. Lond., has been appointed Assistant House Surgeon to the Halifax Infirmary.

HUTTON, JAMES ALFRED, M.D., B.S., M.R.C.S., L.R.C.P., D.P.H., has been appointed Surgeon to the Scarborough Borough Police Force.

KENT, P. W., L.R.C.P., M.R.C.S., has been appointed House Surgeon to St. Thomas's Hospital.

KNAPP, H. H. G., M.B., B.Ch. Oxon., has been appointed House Physician to St. Mary's Hospital.

KNOCKER, W. D., L.R.C.P., M.R.C.S., has been re-appointed Clinical Assistant in the Electrical Department, St. Thomas's Hospital.

LAWSON, R., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Special Department for Diseases of the Skin, St. Thomas's Hospital.

MACPHERSON, W. H., M.R.C.S., L.R.C.P., has been appointed Medical Officer of Health for the Grays District of the Henley Union.

MAIS, FREDERICK W., L.R.C.P., L.R.C.S., has been appointed Medical Officer of the Thorner District of the Wetherby Union.

MARTINEAU, A. J., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

MCMASTER, JAMES, M.D. R.U.I., has been appointed Medical Officer to the Broughshane Dispensary District.

MORGAN, C. A., M.R.C.S., L.S.A., has been appointed Medical Officer of the Thorncombe District of the Beaminster Union.

NASH, E. H. T., L.R.C.P., M.R.C.S., has been re-appointed House Physician to St. Thomas's Hospital.

PATERSON, W. H. J., L.R.C.P., M.R.C.S., has been re-appointed House Physician to St. Thomas's Hospital.

RAY, JOHN HOWSON, M.B., M.S. Vict., F.R.C.S. Eng., L.R.C.P. Lond., has been appointed Resident Surgical Officer to the Manchester Royal Infirmary.

RAY, W. J. ORBELL, L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Special Department for Diseases of the Throat, St. Thomas's Hospital.

RICHARDS, L. W., M.B., B.S. Durh., L.R.C.P., M.R.C.S., has been appointed House Physician to St. Thomas's Hospital.

ROGERS-TILLSTONE, JOHN M., M.R.C.S., L.R.C.P., has been appointed Medical Officer of the Second East Malling District of the Malling Union.

ROSS, WILLIAM, M.B., C.M. Glasg., has been appointed Out-door Medical Officer for the Western District of Govan.

RUBEL, JOHN L., M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer of the Second Division of the Hougham District of the Dover Union.

SANDFORD, G. CALROW, M.D. Edin., has been appointed Resident Medical Officer to the York Dispensary.

SAUNDERS, E. A., M.A., M.B., B.Ch. Oxon., L.R.C.P., M.R.C.P., has been appointed Ophthalmic House Surgeon to St. Thomas's Hospital.

SMITH, J., M.A., M.B., B.C. Cantab., L.R.C.P., M.R.C.S., has been appointed House Surgeon to St. Thomas's Hospital.

SPEARS, JOHN J., L.S.A., has been appointed Medical Officer of the Abrewas District of the Lichfield Union.

ST. LEGER, R. A., M.B., M.S. Edin., has been appointed Medical Officer of Health for the Watford Urban District.

STOKES, J. WILFRED, M.R.C.S.E., L.R.C.P. Lond., has been appointed House Surgeon to the Children's Hospital, The Wicker, Sheffield.

STRANGE, R. G., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

TAYLOR, G. K. O., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

THURSTON, E. O., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Special Department for Diseases of the Ear, St. Thomas's Hospital.

TOOMBS, H. G., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Special Department for Diseases of the Throat, St. Thomas's Hospital.

WAGSTAFF, JOHN P., L.S.A., M.R.C.S., L.R.C.P., has been appointed Medical Officer of the No. 4 District of the Saffron Walden Union.

WATSON, JOHN, M.D., F.R.C.S.E., D.P.H., &c., has been appointed Surgeon to the Newbury District Hospital.

WATTS, A. M., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the Hereford General Infirmary.

WELLINGTON, R. HENSLOWE, L.R.C.P., M.R.C.S., has been re-appointed Medical Officer of Health for the Sutton Bridge Urban Sanitary Authority.

WILLIAMS, J. W., M.D. R.U.I., has been appointed Medical Officer to the Dungarvan Dispensary District.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

ADDENBROOKE'S HOSPITAL, Cambridge.—Resident Assistant House Surgeon. Board, lodging, and washing in the Hospital, but no salary.

BETHLEM HOSPITAL.—Two Clinical Assistants. Board, lodging, and washing.

BLACKBURN AND EAST LANCASHIRE INFIRMARY.—Senior House Surgeon. Salary £100 per annum, with board, washing, lodging, &c.

BRIXTON, STREATHAM, AND HERNE-HILL DISPENSARY.—Resident Medical Officer. Salary £150, with furnished apartments, attendance, coal, and gas.

CAMBERWELL HOUSE.—Junior Assistant Medical Officer. Salary to begin at £160 a year, with board, lodging, and washing.

CAMBERWELL PROVIDENT DISPENSARY, Camberwell-green, S.E.—Vacancy on the Medical Staff.

CHELTENHAM GENERAL HOSPITAL.—Junior House Surgeon. Salary £40 per annum, with board and apartments.

CLIFTON DISPENSARY.—Qualified Dispenser. Salary £90 per annum, with unfurnished apartments.

CORNWALL COUNTY ASYLUM, Bodmin.—Junior Assistant Medical Officer. Salary £100 per annum, increasing by £10 yearly to £120 a year, with furnished apartments, board, washing, and attendance.

DORSET COUNTY HOSPITAL, Dorchester.—House Surgeon. Salary £70 per annum, with board and residence.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House Physician. Board, lodging, &c., are provided, but there is no salary attached to the post.

FULHAM UNION.—Assistant Medical Superintendent. Must devote his whole time to the duties of the office. Salary £120 per annum, increasing £10 yearly to a maximum of £150, with board, furnished apartments, attendance, and washing.

GENERAL HOSPITAL, Birmingham.—Two Anæsthetists. Salary £40 per annum each. Appointment for one year; eligible for re-election.

GLAMORGAN COUNTY ASYLUM.—Junior Assistant Medical Officer. Salary £130, rising to £150. Board, lodging, and washing.

HAMPSTEAD HOSPITAL.—Staff Medical Officer.

HANTS COUNTY ASYLUM.—Third Assistant Medical Officer. Salary £100 per annum; £125 after twelve months' residence board, washing, and attendance. Applications to Committee of Visitors, Knowle, Fareham.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident House Physician.

HOSPITAL FOR WOMEN (THE LONDON SCHOOL OF GYNÆCOLOGY), Soho-square, W.—Clinical Assistants.

JERSEY GENERAL DISPENSARY AND INFIRMARY, Aquila-road, St. Heliers, Jersey.—Resident Medical Officer, unmarried. Salary £120, with furnished rooms and attendance.

OWENS COLLEGE, Manchester.—Senior and Junior Demonstrators in Physiology. Salaries, £150 rising to £200, and £100 rising to £150. Applications to the Registrar.

SALFORD ROYAL HOSPITAL.—House Surgeon. Salary £100 per annum, with board and residence.

SEASIDE COLLEGE.—Resident Medical Officer, unmarried. Must be a good Lecturer on Ambulance, Hygiene, and Domestic Medicine. Applications to R. J. Beevor, M.A., 8, Lancaster-place, Strand

SOMERSET AND BATH LUNATIC ASYLUMS, WESTERN JOINT ASYLUM, Cotford, near Taunton.—Medical Superintendent. Salary on commencing duties £450 per annum until the asylum is opened, which is approaching completion, after which date the following extras will be allowed—i.e., partly furnished house, with coal, light, washing, milk, and garden produce. Applications to the Clerk to the Visiting Committee, Somerset and Bath Asylum, Wells, Somerset.

ST. LUKE'S HOSPITAL, London, E.C.—Clinical Assistant, for six months, with board and residence.

ST. PETER'S HOSPITAL FOR STONE, Henrietta-street, Covent-garden.—House Surgeon for six months. Salary at the rate of £100 per annum

WORKSOP DISPENSARY, Notts.—House Surgeon. Salary £120 per annum, with coals, gas, and attendance.

Births, Marriages, and Deaths.

BIRTHS.

FERGUSON.—On Sept. 3rd, at Elm Grove, Calne, Wilts., the wife of K. S. Ferguson, M.B., C.M. Edin., of a daughter.

REYNOLDS.—On Aug. 31st, at 28, St. Saviourgate, York, the wife of H. W. Reynolds, Surgeon, of a son.

ROBERTS.—On Sept. 7th, at Halstead, Essex, the wife of C. Gordon Roberts, M.A., M.B. Cantab., of a son.

SMITH.—On Aug. 26th, at Gleneagle House, Streatham, S.W., the wife of Harry E. Smith, M.A., M.B., B.C. Cantab., of a daughter.

THOMAS.—On Sept. 3rd, at Greenlawn, Pen-y-lan, Cardiff, the wife of Mr. J. Lynn Thomas, F.R.C.S., of a son.

WILDING.—On Aug. 27th, at The Hawthorns, Hindley, near Wigan, the wife of Walter F. W. Wilding, M.R.C.S., L.R.C.P., M.O.H. Hindley, of a son.

MARRIAGES.

COLEMAN—CURTIS.—On Sept. 8th, at St. Peter's Church, Leicester, by the Rev. W. R. Holmes, Vicar, Alfred Thomas Coleman, L.R.C.P., M.R.C.S., third son of G. T. Coleman, Esq., J.P., of Leicester, to Edith Mary, only daughter of Robert Curtis, Esq., of Ashwell, Knighton, near Leicester.

DOWN—OWEN.—On Aug. 19th, at Totnes Parish Church, by the Rev. James Powning, B.D., assisted by the Rev. T. H. Elliott, M.A., Vicar, Elgar Down, M.R.C.S., of Stoke, Devonport, to Edith Helen, second daughter of the late Dr. T. E. Owen, late of Totnes and Plymouth.

NAYLOR—HORSFALL.—On Sept. 2nd, at St. George's Church, Barrow-In-Furness, by the Venerable Archdeacon of Furness, assisted by the Rev. A. C. Franklin, Joseph Naylor, M.R.C.S. Eng., L.R.C.P. Lond., of Tipton, Staffordshire, fifth son of Joseph Naylor, J.P., Wallis-cote House, Weston-super-Mare, to Alice Mary, second daughter of Richard Noble Horsfall, Manager of the Lancaster Banking Company, Limited, Barrow-in-Furness.

RODLEY—LEACH.—On Sept. 2nd, at Rochdale, John Rodley, M.R.C.S., to Edith Maud Leach, daughter of James Leach, Esq., Birchen House, Rochdale.

DEATHS.

ANDERSON.—Suddenly, on Aug. 23rd, at his residence Bloxworth, Boscombe-park, Bournemouth, Henry Bunting Anderson, M.R.C.S., aged 67. Late of London and Brighton.

BARBER.—On Aug. 30th, at Murree, Punjab, India, Hugh Robert Campbell Barber, B.A., M.B. Camb., Surgeon Captain H.M. Indian Medical Service, Civil Surgeon at Murree, aged 33 years.

JACKSON.—On Sept. 4th, at Wellington-road, St. John's-wood, Paul Jackson, M.R.C.S., L.S.A., formerly of Wimpole-street, W., aged 84.

MACNIELL.—On Aug. 23rd, in Guy's Hospital, Hardinge Charles Christian, L.R.C.P. & S.E., L.F.P. & S.G., of Parkstone, Dorset, the only son of Colonel MacNiell (retired pay), of Blackheath, aged 32.

PALMER.—On Aug. 26th, at Passett-road, North Kensington, Deputy-Surgeon-General William John Palmer, M.D., H.M. Bengal Army (retired), aged 70.

WILLIAMS.—On Aug. 17th, at University College Hospital, Lewis Williams, M.D. Lond., B.M., B.S., aged 27.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Sept. 10th, 1896.

Date.	Barometer reduced to Sea Level and 32° F	Direction of Wind	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Maximum Temp Shade	Min Temp	Rainfall	Remarks at 8.30 A.M.
Sept. 4	29·84	S.	61	60	83	64	56	0·04	Raining
,, 5	29·63	S.E.	62	61	110	70	59	0·63	Fine
,, 6	29·98	N.	60	58	84	62	58	0·12	Dull
,, 7	30·03	N.E	59	58	90	68	56	...	Fine
,, 8	29·90	ESE	62	60	105	70	59	...	Overcast
,, 9	29·62	SSW	64	63	106	70	61	0·45	Cloudy
,, 10	29·61	S.E.	62	61	77	60	59	0·03	Raining

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

THE INDEX TO THE LANCET.

The Index for the first half-yearly volume for 1896 was given in the issue of June 27th. The practice of supplying loose copies has been discontinued, the Index having been placed in the centre of the journal, whence it can easily be detached, and placed either at the beginning or at the end of the volume.

VOLUMES AND CASES.

VOLUMES for the first half of the year 1896 are now ready. Bound in cloth, gilt lettered, price 18*s.*

Cases for binding the half-year's numbers are also ready. Cloth, gilt lettered, price 2*s.*, or post free 2*s.* 3*d.*

To be obtained on application to the Manager, accompanied by remittance.

FERDINAND AGAIN.

THE quack Ferdinand, who was some little time back fined £20 by Mr. Sheil at Westminster, continues to practise. An inquest was recently held upon the body of a woman who died from malignant disease. She had been treated for this at a hospital, but the disease recurring she is alleged to have paid, or to have agreed to pay, certain sums to Ferdinand for cure. As the case is *sub judice* we refrain from any comment.

"WANTED, A DIAGNOSIS."

To the Editors of THE LANCET.

SIRS,—The case detailed by "W." in your last issue strikes me as possibly a very early stage of locomotor ataxy—the leg pains being the lightning pains of that disease, the surface lesion due to some impairment of trophic influence, and the flatulent distension of stomach an incipient gastric crisis. This seems to me the most likely view, though, of course, against it is the fact that there are no symptoms of any nervous lesion. On this supposition treatment is, of course, very unsatisfactory. Antifebrin will relieve the pains longest of all the analgesics, and for the general chronic condition potassium iodide and arsenic will sometimes be of service. I am, Sirs, yours truly,

Sept. 2nd, 1896. G. C.

Mr. Thos. St. Clair.—The place of residence of a practitioner does not affect the General Medical Council's jurisdiction over him, but in the Isle of Man, as in any British possession, prosecutions for infringements of the Medical Acts would be subject to any local law. Residents in the Isle of Man have no votes in the election of direct representatives to the General Medical Council.

OBJECTIONABLE NEWSPAPER NOTICES.

WE have received a copy of the *Express and Telegraph*, published in Adelaide, South Australia, and dated Saturday, July 25th, 1896, in which the qualifications of Dr. Leith Napier and Dr. Ramsay Smith, the newly-appointed medical officers to the Adelaide Hospital, are set forth in a manner that is distinctly objectionable. We acquit these two gentlemen of complicity, but unless they take steps to repudiate this public dissemination of their virtues they must not be surprised if it constitutes a cause of offence to their brother practitioners in the Antipodes. The article in question details the opinion of, among others, a President of the Royal College of Physicians of London, a late President of the Royal College of Physicians of Edinburgh, and a late President of the Royal College of Surgeons of Edinburgh, as to their respective abilities, while their portraits—in the case of Dr. Leith Napier in the character of an alert enquirer, in the case of Dr. Ramsay Smith in the character of a contemplative philosopher—also adorn the column. It is to be hoped that Dr. Leith Napier and Dr. Ramsay Smith will take immediate steps to repudiate any connivance in this objectionable and fulsome publicity.

Deafness.—The work on Deaf-Mutism, by Dr. James Kerr Love of Glasgow, published during the present year by Messrs. Maclehose and Sons, publishers to Glasgow University, has about twenty pages on lip-reading for the deaf. We cannot undertake to recommend individual instructors, but for teachers in London our correspondent may refer to the advertisement columns of THE LANCET of Sept. 5th, page 127.

Constant Subscriber.—The makers of the Kiesow Patent Safety Lamp are Messrs. Kiesow and Co. of 25, Fore-street-avenue, London, E.C.

THE TAN-O-CEA TABLET CO.

WE have received from a correspondent the following letter for publication which has been addressed to him by this company:—

"Wilton Chambers, Victoria, S.W.

"Dear Sir,—In submitting samples of tan-o-cea for your esteemed inspection we venture to say that amongst your patients there are those who would derive great and lasting benefit from the use of these tablets.

"We are soliciting the opinion of medical men well known in the neighbourhood of their practice, and now beg to approach you with that object in view.

"If you will please try the samples we should exceedingly value your views of same, and providing you raise no objection these views would probably be the means of bringing and keeping your name very prominently before a large section of your parishioners. And, further, we would be willing, if so desired, to pay for an opinion definitely expressed. Your reply will be treated as a private and confidential one by—

"Your obedient servants,

"(Per) TAN-O-CEA TABLET CO."

*** There can be but one opinion upon this letter. It is a gross impertinence to the medical man to whom it is sent. It distinctly promises that if he will give the company's wares a puff the company will repay him not only by circulating his name to the public in his capacity as medical man, but in cash. No respectable medical man would pay any attention to such a circular.—ED. L.

Mould.—The adult male brain weighs on an average 49·5 ounces; the female brain weighs from 5 to 5·5 ounces less than the male. The cerebrum forms about 87·5 per cent. of the entire brain; the cerebellum about 10·5 per cent.; and the pons and medulla about 2 per cent.

"THE REMUNERATION OF LOCUM-TENENTS."

To the Editors of THE LANCET.

SIRS,—I quite agree with "Fairness" that it is not always "meanness" which dictates the offer of less than £3 3*s.* a week with travelling expenses and all found to a locum-tenent. A few figures will prove that an average country practitioner can ill afford to pay anything at all for a substitute, and is therefore compelled to go on from year to year without a holiday.

The following figures may be taken to represent the income and expenditure of a large proportion of our class. If it be thought that they err at all, I can certainly say that the income given is larger and the expenditure less than many a man's books will show.

Income £400.	
Rent of House	£30
Drugs and Instruments	40
Groom's wage	50
One horse, food and shoeing, &c.	50
Two servants, wage and board...	60
	£230

This leaves an income of £3 5*s.* 4½*d.* per week, out of which the struggling practitioner has to keep himself and pay all the incidental expenses of a household, besides subscriptions to all sorts of societies, which look upon a medical man as their lawful prey. If to these expenses we add the salary of a locum-tenent for a fortnight—

Fees	£6 6 0
Travelling	1 0 0
Board	1 10 0
	£8 16 0

the income becomes immediately narrowed down to £3 2*s.* per week or actually less than the cash payment demanded by the substitute, to say nothing of his travelling expenses and board. I have no wish to infer that £3 3*s.* per week is too much, but I certainly think that the man who is slaving away from year's end to year's end, Sunday and week day, with no break in the monotony of his life, is worth incomparably more than the man who takes his work over for a week or two and is comparatively without responsibility. At all events, it is too bad to speak of second or first-class travelling expenses when such luxuries are unknown to the incumbent. If a cry is to be raised at all, let it be raised first of all against those public institutions which expect the best men of their year to serve them laboriously for nothing beside their board. Let it next be raised against those who throw their doctor's bills on one side, and let one's brother practitioners not be so eager to attend patients who have been turned over on this account.

Let the cry next go out against all clubs paying under a certain sum per head. Then, when all these abuses have been redressed, time may be found to investigate the claims of locum-tenents, who are probably at present (with the exception of consultants and practitioners in first-class districts) among the best paid members of the profession. Then they will not be grudged what is certainly their due—a "living wage" and something more. If only they will take these figures to heart, they will surely retract the accusation of "meanness" when speaking of us who are compelled to work hard for a living in scattered districts, where the journeys alone are a severe tax upon one's strength, with little hope of laying anything by for a rainy day or for old age. Apologising for the length of this letter,

I am, Sirs, yours faithfully,

Sept. 7th, 1896. THE OTHER SIDE.

To the Editors of THE LANCET.

SIRS,—Your correspondent "Fairness" has not, I think, taken into account the fact that a locum-tenent cannot always find employment; if this were the case he could do very well on two guineas a week, all found. Even such a short time as three weeks' non-employment soon runs away with the bulk of one's earnings if one wishes to be independent of friends. During the winter it is only by the greatest stroke of luck that employment can be found at locum-tenents' usual rate of pay. A practitioner can, in my humble opinion, always manage to put by sufficient to pay a locum at the usual rate for a fortnight or three weeks. I am, Sirs, yours faithfully,

Aug. 28th, 1896. TEMPERANTIA.

Mr. Chas. Heaton.—The Pasteur or Berkefeld filter is, we should say, equally suitable. They will both work without pressure, but, of course, only slowly. There is a small Berkefeld hand-pump and filter which would do for travelling.

THE NEW PHOTOGRAPHY.

WE have been asked by the Photographic Association, 16, Brook-street, Hanover-square, to announce to our readers that their studios are supplied with apparatus for "x" ray photography, and that full information on the subject, lessons, and sittings are given by appointment. Surgeons who subscribe two guineas per annum can send to the Association any cases which may occur in their practice during the twelvemonth where photography by Roentgen rays would help in diagnosis or treatment, cost of material only being charged.

OPHTHALMIA NEONATORUM.

To the Editors of THE LANCET.

SIRS,—Is it possible in every case of the above to prevent blindness? During a practice of ten years I have had several cases, and blindness has been the result in at least four. Some, I know, were not treated as directed, but in the last case I have every reason to feel assured my directions were carried out. In this a slight discharge was noticed on the second day of birth, the eyes were then washed out with a 1 in 2000 perchloride solution by myself and a solution of boric acid, two grains to one ounce, given to the nurse to use every hour. On the third morning the discharge was rather more, but not purulent, and the eyes were again well washed out with the same $HgCl_2$ solution. In the evening, nine hours later, the discharge was plentiful and purulent. The eyes were then well syringed out with the boracic acid solution and immediately afterwards with nitrate of silver, ten grains to the ounce. The eyes were then syringed every twenty minutes with 1 in 6000 perchloride solution by a competent nurse obtained for the purpose. The subsequent treatment varied somewhat, but in spite of a specialist's advice the cornea perforated with the discharge of a faintly yellowish jelly-like material on the seventh day. I am, Sirs yours faithfully,

OPHTHALMIA.

P.S. The eyes were syringed out at least every two hours the whole week.

T. O. R.—We cannot recommend anything better than the stove our correspondent suggests. Address Messrs. J. F. Farwig & Co., 4, Upper Thames-street, E.C.

A LADY DOCTOR IN ABERDEEN.

THE *Aberdeen Weekly Journal* contains in its issue of Sept. 2nd a repetition of its eulogy of a certain lady practitioner. We have previously pointed out that the newspaper notices which this lady has received are objectionable (THE LANCET, Aug. 22nd, 1896, p. 583). They may assist her to "find among the wealthy class more sympathy with her work and aims," but they will not endear her to her fellow practitioners. The notice in question is embellished with a portrait of a prepossessing young female.

G. S. B.—Mr. James B. Davis, the secretary of the English Anti-Tobacco Society, 25, Market-street, Manchester, will be able to supply our correspondent with the information he desires. He should also consult "Diseases of Modern Life," by Sir B. W. Richardson.

M.R.C.S. Eng., &c.—Consult "The Diseases of Cats and Dogs," published at 42, Bishopsgate Without, E.C.

FOUND ARTICLES.

To the Editors of THE LANCET.

SIRS,—On Aug. 28th a patient of mine found near Crouch End Railway Station a pocket-case containing: female catheter (s.lver); minim measure and three bottles containing ergot, opium, and sp. æth. co. and sp. am. ar. Will you kindly insert a note in your widely read journal in the hope that the owner may see it? If owner applies to me I will either forward the case or put him in communication with the finder. I am, Sirs, yours faithfully,

W. H. PAINE, L.R.C.P. Lond.

10, Havergal-villas, Wood-green, N, Sept. 1st, 1896.

D. O. M.—Our correspondent does not give us sufficient information. The butcher does not commit a libel by disagreeing, but if he holds the medical man up to contempt in his profession and publishes such contemptuous opinion abroad, or causes the medical man loss or damage which can be proved, grounds for an action would certainly exist. A solicitor should be consulted.

"NOT AT HOME."

AT an inquest recently held in the East-end the medical man who gave evidence was solemnly reprimanded by a juryman for saying that he was "not at home" when he was indoors. This formula, though in the early part of the century it roused Colonel Newcome's wrath, has come to be an accepted way of saying, "I don't want to see you," and everyone recognises it as such. A medical man is free to do as he likes, for except in the case of a parish medical officer he is not paid out of the rates nor very often in any other way. The idea that a medical man is paid out of the rates still holds good, though among the uneducated, and probably what offended the juror was not the society lie, but the fact of the medical man daring to refuse to go out.

Alpha.—Our answer would necessarily be of the nature of a speculation, and probably a profitless one. The clause designs to leave discretion with the guardians, and we could not attempt to guess what any particular body of guardians might consider to constitute special or peculiar circumstances.

X. has given an insufficiently full name and no address.

WANTED, AN APPARATUS FOR THE INHALATION OF COMPRESSED AIR.

To the Editors of THE LANCET.

SIRS,—Will any of your readers kindly inform me where I can procure Waldenberg's or other apparatus for the inhalation of compressed air (please state price)? I applied to a well-known manufacturing firm, but they said they could not give me any information about it. I am, Sirs, yours faithfully,

Sept. 1st, 1896. PNEUMATIC.

A. B. C.—The first "Medical Directory," which was for London only, was published in 1845. The issue for 1847 included London and the Provinces.

ERRATUM.—We regret that in our issue of Aug. 29th the word "Ringer's" in Mr. Martindale's letter (page 634, col. 2, line 15 from foot) was inadvertently printed "Kruger's." Oom Paul's personality is present even in the composing-room of a medical paper.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (14th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M., Ophthalmic 1.15 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.).

TUESDAY (15th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (2 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY (16th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY (17th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.). St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.)

FRIDAY (18th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY (19th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

During the week marked copies of the following newspapers have been received:—*Yorkshire Post, City Press, Shrewsbury Chronicle, Leeds Mercury, Bristol Mercury, Lincolnshire Chronicle, Reading Mercury and Oxford Gazette, Hertfordshire Mercury, Liverpool Courier, Mining Journal, Weekly Free Press and Aberdeen Herald, Sheffield Daily Telegraph, Windsor and Eton Express, Surrey Advertiser, Dublin General Advertiser, Hemel Hempstead Gazette, Liverpool Daily Post, Warrnambool Echo, Lancashire Daily Post, Times of India, Pioneer Mail, Macclesfield Courier, Middlesex and Surrey Express, Saturday Herald, Sheffield and Rotherham Independent, Brighton Gazette, Christian World, Le Petit Journal, Mansfield and North Notts. Advertiser, Malvern Advertiser, Castleford Gazette, Ripley Advertiser, Midland Weekly Herald, Bedfordshire Mercury, Leigh Chronicle, Local Government Chronicle, Halifax Guardian, Kilkenny Moderator, Gloucestershire Chronicle, Nuneaton Observer, Nottingham Daily Express, Meath Herald, Grantham Journal, Knaresborough Post, Alloa Advertiser, Glasgow Weekly Herald, Nottingham Daily Guardian, Kingston and Surbiton News, Manchester Guardian, Weston-super-Mare Gazette, East London Observer, Midland Free Press, Manchester Courier, Essex Herald, Grimsby News, Sheffield Evening Telegraph and Star, West Middlesex Herald, Harrogate Herald, &c., &c.*

Communications, Letters, &c., have been received from—

A.—Dr. A. Anderson, Sheffield; Addenbrooke's Hosp., Cambridge, Sec. of; Mr. A. W. M. Anden, Shildon; Ashton-under-Lyne Corporation, Sanitary Supt. of; Messrs. Armour and Co., Lond.; Messrs. E. Austin and Son, Clifton; Miss Ashby, Kew.

B.—Mr. J. F. Bell, Lond.; *Bristol Mercury*, Manager of; Messrs. Burroughs, Wellcome and Co., Lond.; Dr. L. H. Bennett, Lond.; Messrs. Burgoyne, Burbidges and Co., Lond.; Benedict, Lond.; Birmingham General Hosp., House Governor of; Blackburn Infirmary, Sec. of; Messrs. Belshaw and Co., Lond.; Mr. F. Baber, Lond.; Dr. G. W. Bird, Lond.; Mr. J. D. Bradley, Pennsett; Dr. F. H. Berry, Watford; B. S., Birmingham; Prof. Campbell Black, Glasg.; Mr. A. H. Buck, Brighton; Biceps, Lond.; Dr. A. J. M. Bentley, Alford, N B.

C.—Mrs. Carter, Eastbourne; Clinical, Lond.; Cheltenham General Hosp., Hon. Sec. of; Mr. Stanley Copley, Stamford; Mr. R. B. Carter, Lond; Mr. A. Clark, Leicester; Cornwall County Asylum, Bodmin, Med. Supt. of; College of Preceptors, Lond., Sec. of.

D.—Mr. F. Davidson, Lond.; Mr. A. N. Davis, Ivybridge; Mr. W. J. R. Dunn, Liverpool; Dr. R. Davies, Wrexham; Dr. B. M. Dockrell, Lond; Mr. C. E. Duslow, Lond; Messrs. S. Deacon and Co., Lond.

E.—Mr. F. Evans, Lond; Mr. Walter G. Earle, Lond.; Mr. W. C. Ellis, Tollerton; Mr. W. G. Earle, Nottingham.

F.—Herr G. Fischer, Jena; Dr. T. D. Forbes, Ladybank; Mr. J. Fotherick, Parkdale.

G.—Mr. W. E. Groves, Dorchester; Messrs. Wm. Glendinning and Sons, Newcastle-on-Tyne; Grand Atlantic Hotel, Weston-super-Mare, Proprietor of.

H.—Mr. J. Heywood, Manchester; Mr. J. Holden, Willoughbridge; Mr. C. H. Huish, Lond.; Hosp. for Women, Lond., Sec. of; Mr. J. Harper, New Malden; Dr. W. Harding, Rathmines; Mr. C. J. Heaton, Lond.; Mr. H. E. Haycock, Alfreton; Mr. T. Garrett Horder, Cardiff; Dr. R. T. Hewlett, Lond.; Mr. Charles Heneage, Eastbourne; Mr. W. E. Hempson, Lond.; Dr. Alfred Hill, Durham; Messrs. Hertz and Collingwood, Lond.

I.—International News Co., Lond.; Mr. W. Idiens, Hampton; Income Tax Adjustment Agency, Lond., Sec. of.

J.—Jenner Society, Gloucester, Sec. of.

K.—Mr. H. Knaggs, Scalby; Mr. F. H. Knaggs, Huddersfield; Dr. H. R. Kenwood, Lond.; Messrs. W. Kemsley and Co., Lond.

L.—Dr. J. F. Little, Lond.; Messrs. Loxley Bros., Sheffield; Locum. Lond., Messrs. Lee and Nightingale, Liverpool; Liq. Carnis Co., Aston Clinton; Mr. H. Littlewood, Leeds; Dr. D. C. Lamb, Lond.; Liverpool Food Assn., Hon. Director of.

M.—Mr. W. H. Macpherson, Henley-on-Thames; Mercury, Lond.; Messrs. Mather and Crowther, Lond.; Messrs J. and C. Mort, Stafford; Messrs. Maple and Co., Lond.; Dr J. D. Malcolm, Lond; Mr. George Morgan Brighton; Surg.-Maj. Charles Monks, Bombay; M.R.C.S., Ormskirk; Mrs. M. McGready, Ballynahinch; Dr. T. K. Monro, Glasg.; Mr Mark McDonald, Waterloo; Messrs. C. Mitchell and Co., Lond.

N.—Dr. J. Nell, Oxford; Mr. J. G. Nevitt, Chapel Allerton.

O.—Mr. J. H. O'Conor, Thurles; Mr. C. M. O'Brien, Dublin.

P.—Mr. M. St. B. Prichard, Lond.; Messrs. Parke, Davis and Co., Lond.

Q.—Queen's Hosp., Birmingham, Sec. of.

R.—Mr. Josiah Ritchie, Lond.; Royal Photographic Society, Lond., Sec. of; Mr. T. P Roberts, Harrogate; Dr. C. H. Ramsbottom, Douglas; Messrs. J. Richardson and Co., Leicester; Messrs Robinson and Sons, Chesterfield; Dr. George Reid, Stafford; Mr. H. Reeves, Lond.

S.—Dr. Saw, Perth, Australia; Messrs. Street, Lond.; Swiss, Bury St. Edmunds; Salford Royal Hosp., Sec of; Springfield House Asylum, Med. Supt. of; Messrs. G. Street and Co., Lond.; Mr. G. Slater, Sheffield; Messrs. S. Smith and Co., Lond.; Scrutator, Newcastle-on-Tyne; Dr. R. C. Shettle, Reading; School of Medicine of the Royal Colleges, Edin., Sec. of; Mrs. Stansfeld, Londonderry; Dr. Richard Sisley, Lond.; Dr. C. B. Savory, Haverfordwest; Dr. C. S. Sherrington, Liverpool; St. Mary's Hosp. Medical School, Sec. of; Brig.-Surg. Lt.-Col. W. F. Stevenson, Netley; Dr. F. J. Smith, Lond.

T.—Mr. T. W. Telford, Whitehaven; Mr. J. H. Thompson, Manchester; Dr. Tinley, Whitby.

W.—Dr. R. L. Wood, Sherringham; Dr. J. Wilson, Edin.; Mr. V. Wood, Lond; Worksop Dispensary, Sec. of; Dr. J. W. Washbourn, Lond.; Mr. C. H. Wells, Lond.

Letters, each with enclosure, are also acknowledged from—

A.—Mr. G. R. Anderson, Southport; Andes, Lond.; Mons. J. Astier, Paris; Mr. R. C. Appleton, Beverley; Mr. R. H. Adam, Bolton, A. B., Taunton; A. B. C., Gretton; A. X., Lond.; Aurora, Lond; Dr. K. Ash, Stoke-on-Trent; Auriol, Lond; Acus, Lond.

B.—Mr. F. S. Boreham, Lowestoft; Mr. H. H. Ballachey, Chelford; Mr. M. Burke, Skibbereen; Messrs. Blondeau et Cie, Lond.; Dr. J. C. Bowie, Clousta, Shetland; Messrs. Battle and Co., Paris; Bee, Lond.; Mr. T. H. Brocklehurst, Yeovil; Messrs. T. Brackstone and Co., Colwyn Bay; Beta, Lond.; Dr. D. C. Black, Glasg.; Mr. C. Beesley, Darton; Berrie, Newport, Salop; Mr. J. Brookes, Llanwrtyd Wells; Mr. P. Butler, Chiddingfold; Messrs. Brown, Gould and Co., Lond.

C.—Mr. Carpendale, Falkland; Clinical, Lond.; Messrs. G. Curling and Co., Lond.; Mr. A. T. Coleman, Leicester; Clavicle, Lond.; C., Lond.

D.—Mr. A. Denny, Compton Martin; Digitalis, Lond; D. A., Lond.; Mr. A. B. Dyson, Halifax; Dr. R. E. Deane, Wilmslow; Mr. J. Delahunt, Lond.; Mr. T. H. B. Dobson, Seascale.

E.—E. M., Lond.; Eta, Lond.; E. A., Ingatestone.

F.—Dr. A. Forsyth, Mevagissey; Fifeshire, Lond.; Fides, Lond.; Dr. R. S. Ferguson, Calne.

G.—Mr. A. Greer, Richhill; Mr. A. B. Griffiths, Lond.; Gwalia, Lond.; G. J., Woodford; Great Swan Alley (10), Moorgate-street; Gamma, Lond.; Mrs. Gordon, Newry; Dr. R. Gill, Lond; Mr. W. H. Garner, Clonmel; Mr. A. W. Griffin, Crowborough.

H.—Mr. R. N. Horsfall, Barrow-in-Furness; Messrs. Henderson and Son, St. Andrews; Hull and Sculcoats Dispensary, Sec. of; H. J., Lond.; Dr. A. Hardwick, Newquay; Mr. C. Haltoun, Loughton; Surg.-Lt.-Col. C. J. Hall, Allahabad; Mr. G. E. Hall, Wolverhampton; Hyoscymus, Lond.; Dr. C. F. Harding, Whittlesea; Mr. W. Heap, Liscard; Hygiene, Lond.

J.—Dr. H. M. Joy, Grand Rapids, U.S.A.; Mr. E. L. Jenkins, Pontypool; Dr. T. Jackson, Colwyn Bay; Mr. J. H. Jeans, Heathfield; J. W., Lond.

L.—Dr. Lancaster, Rockdale; Mr F. Lord, Southsea; Lambda, Lond; Locum, Warrington; L.R.C.P.E., Portheawl; L. R. D., Lond.; Lattice Elastic Stocking Co., Lond.; Mr. F. W. S. Lacey, Roxton; Locum Tenens, Parwich; Mr. E. Lumsdon, Wolverhampton; Messrs. Laidlaw and Sandeman, Galashiels; Mr. F. W. Lines, Llandovery.

M.—Mr. J. Macfadyean, Belfast; Dr. J. Macmillan, Edin.; Mr. S. Mackey, Wolverhampton; Dr. A. Macdonald, Lond.; Col. C. W. McNeill, Parkstone; M. O. H., Lond; Mr. J. Macartney, Glasg.; M.B., Lond.; M. W. H., Lond.; Medicus, Lond; M.D., Manchester; Mr. D. Moody, Newry; Medicine, Lond.; Dr. A. Mackay, Crook; Dr. A. Macdonald, Lond.

N.—Nemo, Lond.

O.—Mr. A. B. C. Orchard, Silverdale; Mr. J. E. S. Old, Carlton; Mr. T. J. Owen, St. Davids; Mr. F. Orchard, Lond.; Omega, Lond.

P.—Dr. W. H. Pollard, Tollesbury; Principal, Worthing; P. M., Lond.; Messrs. Potter and Sacker, Lond.; Physician, Lond.; Dr. Pratt, Lond.; Peritus, Lond.; Messrs. Potter and Clarke, Lond.; Practice, Lond.; Mr. M. Pittard, Swineshead; Practitioner, Lond.; Mr. H. A. Pearson, Inkberrow.

R.—Dr. R. Roycroft, Skibbereen; Reipan, Lond.; Mr. R. Roberts, Rhymney; Messrs J. Raphael and Co., Lond., Radix, Lond.; Mr. R. Roberts, Ludlow; Mr. A. B. Reck, Copenhagen; R., Lond.

S.—Dr. B. Saunders, Lond.; Solicitor, Brierley Hill; Spence, Lond.; Messrs. Salamon and Co., Rainham; Dr. C. J. Symonds, Lond.; Dr. J. A. Sutherland, Cleckheaton; Mrs. E. Stewart, Lond.; Scrutator, Lond; S., Lond.; Statim, Lond.; Mr. H. S. Stokes, Lond.; Scalpel, Lond; Septim, Lond; Mr T. S. Sutton, Thaxted; Mr. R. B. Smith, Eccles; Standard, Lond.

T.—Mr. J. Thin, Edin.; Tempus, Lond; T. J. C., Harrogate; Tower House Retreat, Westgate-on-Sea; Mr. R. G. Turner, Uganda; Mr. T. W. Thomas, Caerphilly; Miss E. Turner, Sheerness; Mr. W. Twyford, Audlem; Mrs. J. C. Taylor, Gronville, Jersey; Mr. W. Tim, Northampton; Mr. J. Lynn Thomas, Cardiff; T. A., Leeds.

U.—Unique Opportunity, Lond.

V.—Viator, Lond.; Vicar, Chesterton.

W.—Mr. C. F. Weinman, Aberdeen; Mr. D. O. Williams, Glandovey; Dr. H. M. Wilson, Sheffield; Wilton, Lond.; Mr. H. W. West, Lond.; Mr. S. Wand, Leicester; Wilton, Lond.; Mr. J. P. Wagstaff, Farneaux Pelham.

Y—York, Lond.; Yorkshire Post, Leeds.

SUBSCRIPTION.

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An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on pages 2 and 4, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

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